



## The Great Australian Dream: Density and Aspirations in Sydney

A global assessment of the relevance of aspirations in influencing spatial planning in cities

Laila Mehrpour

NAWIC 2012 International Women's Day Scholarship White Paper

## Abstract

Since the post war period, Sydney has experienced high levels of growth and subsequent low density urban sprawl. Today, the vast majority of the city is primarily a residential environment with a predominantly low density, detached housing form across much of the city. As a result, Sydney is experiencing a number of problems not uncommon to sprawling cities in general: declining and costly infrastructure, lack of affordable housing close to amenities and increasing economic segregation.

Despite the clear need for a more proactive and sustainable approach to housing, particularly in the context of Sydney's wider aspirations of becoming a global city, the perception of continued demand for low density suburban housing is consistently cited as the primary obstacle to the provision of housing at higher, more sustainable densities. Higher density housing is widely viewed as an affront to the Great Australian Dream – the aspiration to own a house and land. This study reviews the continued relevance of the Great Australian Dream as a driver of housing development in Sydney.

The Great Australian Dream and the cultural contexts from which it emerged are examined against the theoretical framework of two opposing schools of thought – New Urbanism and New Suburbanism. Sydney's macro aspirations (via the assessment of policy) to be a global city and micro housing aspirations (via geo-demographic segmentation) to determine the prevalence of the desire for the Great Australian Dream are assessed. The findings of these assessments are then used to examine four global cities, London, New York, Copenhagen and Detroit. The types of households perpetuating Sydney's sprawl paradigm are identified as the control group for the purposes of this study. The equivalent types in each city are identified, and the particular types of housing in which they live, assessed.

The results of the study reveal equivalent types to the control group are present in every city, but detached housing to be at negligible levels in both London and New York, and to form a low percentage of the housing for the same types of households in Copenhagen. It was found that the housing choices made between the British and American populations are very different. A large proportion of New Yorkers were found to be equivalent types to Sydney's control group, while they represented only a small percentage of Londoners, with the majority of these types choosing to live outside of the city confines. The findings demonstrate Sydney to be closer to the levels of detached housing and attitudes to housing as those found in Detroit. The table below shows the results of the housing forms of the control group equivalents in each city.

	% control group	% of control group living in detached housing	% population in the control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>London</b>	8.28%	0.00%	0.00%
<b>New York City</b>	58.64%	0.00%	0.00%
<b>Copenhagen</b>	27.92%	22.17%	6.19%
<b>Detroit</b>	65.37%	71.01%	46.42%

Containment was found to be the most important factor behind achieving successful smart growth mechanisms, in every case defined by either natural geographic containment, or an applied greenbelt. It is also found that while all of the proactively planned cities are focussed on delivering infrastructure to lower income neighbourhoods, there are still growing gaps between the top and bottom of the income scale. This was found to mainly be due to the escalation in the levels of wealth of those at the very top of the wealth scale due to the global exposure and opportunities in the cities in which they live. Overall, the Great Australian Dream in its current definition was found to be at best a redundant driver of development strategies, and at worst a destructive force for the longevity of the city. The Great Australian Dream needs to be redefined for future generations in the context of the city's macro aspirations for its future to ensure its longevity and prosperity.

## ACKNOWLEDGEMENTS

There are many people to whom I am indebted for both their support and generosity with their time and resources. Without them, the undertaking and completion of this research would have been impossible.

First and foremost, I wish to acknowledge and thank my family, particularly my mother and my late father for their unfailing love, support and encouragement.

I wish to give my heartfelt thanks to my husband, Cameron Vella, who has been a constant source of encouragement and support throughout the research, travel and writing process as well as my greatest advocate.

My employer, Lend Lease, has been instrumental in allowing me the time required to explore this topic. I particularly wish to thank Melissa Haigh for her friendship, encouragement and generosity with her expertise and my mentor, Tony Brennan, for his vision, advocacy and support of both me and my research.

I wish to thank the Interdisciplinary Design for the Built Environment (IDBE) course team at the University of Cambridge, in particular Dr Sebastian Macmillan, for accepting me into the course and his enthusiasm and encouragement which started me on this path.

My NAWIC IWD paper mentor, Anne Sutherland, for engendering a passion for this topic in me in the first place and organising the invaluable time spent with Gehl Architects in Copenhagen and my Danish contact, Anne Sophie Kvist of Gehl Architects, for providing an inspirational perspective into the Nordic approach to planning and design.

The team at Mosaic Global in Nottingham, in particular Jayne Fleming, for generously supplying valuable market data for the United Kingdom and Denmark, and making the leap in understanding the potential impact of consumer segmentation on city planning.

Finally, I wish to thank NAWIC for giving me the opportunity and platform to explore a topic about which I am truly passionate.

## CONTENTS

Abstract .....	2
ACKNOWLEDGEMENTS .....	3
CONTENTS .....	4
Figures and Tables .....	6
INTRODUCTION .....	8
Methodology.....	9
City selection process.....	10
Research.....	11
CHAPTER 1 – THE GREAT AUSTRALIAN DREAM AND SYDNEY’S HOUSING QUANDARY .....	13
Home Ownership and the Taxation System .....	14
Sydney’s Housing Quandary .....	14
Affordability.....	16
Income versus housing type .....	16
CHAPTER 2 – THE THEORETICAL CONTEXT: NEW URBANISM AND NEW SUBURBANISM .....	19
CHAPTER 3 – SYDNEY IN A GLOBALISING CONTEXT.....	22
The role of government .....	23
Development in Greenfield areas .....	24
Metropolitan Plan for Sydney .....	25
Global Comparison.....	28
CHAPTER 4 – CONSUMER SEGMENTATION AND THE CONTROL GROUP .....	32
The control group .....	32
What is Mosaic? .....	32
How is Mosaic used? .....	33
Sydney’s Mosaic Profile.....	35
Identifying the control group - Methodology.....	37

CHAPTER 5 – LONDON .....	40
Containment Objectives .....	40
London's Mosaic Profile .....	41
CHAPTER 6 – NEW YORK .....	43
New York's Macro Aspirations .....	43
Copenhagenising NYC .....	44
Urban Renewal .....	44
New York's Mosaic Profile .....	46
CHAPTER 7 – COPENHAGEN .....	48
Copenhagen's Mosaic Profile .....	51
CHAPTER 8 – DETROIT .....	54
CONCLUSION .....	57
APPENDIX A – LONDON .....	61
APPENDIX B - NEW YORK AND DETROIT .....	63
New York .....	63
Detroit .....	70
REFERENCES .....	71

## Figures and Tables

Figure 1.1 – Households by Income in Sydney.....	17
Figure 1.2 –Detached Housing in Sydney.....	17
Table 3.1 – Forecast Population Growth in Sydney's subregions.....	23
Figure 3.1- Sydney's Ten Subregions.....	24
Figure 3.2 – Highest levels of detached housing in Greenfield development areas by LGA.....	25
Table 3.2 – Metropolitan Strategy Performance – Measures of Success .....	26
Figure 3.3 – North Western and South Western Growth Centres in Metropolitan Sydney .....	27
Table 3.3 – Global Cities Index 2010.....	28
Table 3.4 – Characteristics of Global Cities .....	29
Figure 3.4 – Global Cities by Area and Density .....	31
Figure 4.1 – Mosaic Global Groups .....	33
Table 4.1 – Mosaic Groups and Types by percentage for Sydney and Australia .....	34
Figure 4.2 – Sydney Basin Mosaic Map and Legend.....	36
Table 4.2 –Mosaic Types most likely to live in detached housing.....	37
Figure 4.3 – Mosaic Types by distance from the city centre .....	37
Table 4.3 – Sydney's control group by Mosaic Type .....	38
Table 4.4 – Mosaic Global Look Up Table (Sydney's control group Types highlighted) .....	38
Figure 5.1 – Greenbelt Strategy and areas of deficiency in access to nature in London .....	41
Table 5.1 – Mosaic UK Types of Sydney's control group in London.....	42
Table 5.2 – Comparison of Sydney's control group and London's control group equivalents.....	42
Figure 6.1 – The New York City High Line development .....	45
Table 6.1 - Mosaic USA Types of Sydney's control group in New York City .....	46
Table 6.2 – Comparison of Sydney's control group and New York's control group equivalents .....	47
Figure 7.1 – City Country Fingers and the Copenhagen Finger Plan .....	48
Figure 7.2 – Bike lanes in the northern fringe suburbs of Copenhagen.....	49
Figure 7.3 – Recreation in Copenhagen is primarily carried out in public spaces.....	50
Table 7.1 – Mosaic Denmark Types of Sydney's control group in Copenhagen.....	51
Table 7.2 – Comparison of Sydney's control group and Copenhagen's control group equivalents .....	51
Table 7.3 – Types of Housing for the Danish equivalents of Sydney's control group .....	52
Table 7.4 – Dwelling stock by type of building – regional analysis (Denmark, 2009).....	52
Figure 7.4 – Apartments in central Copenhagen .....	53
Figure 8.1 – Detroit and its environs and the Detroit-Warren-Livonia MSA and Detroit-Warren-Flint CSA .....	54
Table 8.1 - Mosaic USA Types of Sydney's control group in Detroit.....	55
Table 8.2 – Comparison of Sydney's control group and Detroit's control group equivalents .....	56

Figure 9.1 – Global Comparison of the control group in Sydney, London, New York, Copenhagen and Detroit .....	58
Table A – Mosaic Global Look Up Table (Sydney's control group highlighted) .....	61
Figure A1 – Distribution Chart of percentage representation of Type B07 in the United Kingdom .....	61
Figure A2 – Mosaic Data Chart – Type of Property .....	62
Table B1 – Mosaic Global Look Up Table (Sydney's control group highlighted) .....	63
Table B2 – Top Mosaic Types in Manhattan by Zip Code .....	64
Table B3 –Top Types in Manhattan (Summary) .....	65
Table B4 – Top Mosaic Types in Queens by Zip Code.....	66
Table B5 – Top Types in Queens (Summary).....	67
Table B6 – Top Mosaic Types in Brooklyn by Zip Code .....	67
Table B7 – Top Types in Brooklyn (Summary) .....	68
Table B8 – Top Mosaic Types in the Bronx by Zip Code.....	68
Table B9 – Top Types in the Bronx (Summary).....	68
Table B10 – Top Mosaic Types in Staten Island by Zip Code .....	69
Table B11 – Top Types in Staten Island (Summary) .....	69
Table B12 – Top Mosaic Types in Detroit by Zip Code.....	70
Table B13 – Top Types in Detroit (Summary).....	70

## Introduction

The purpose of this paper is to assess the validity of the concept of the Great Australian Dream in driving housing policy and development solutions in Sydney, the largest and oldest of the Australian capitals. To date, the Great Australian Dream has had a significant role in defining the physical form of Australia's burgeoning urban capitals.

As with all of the country's major urban capitals, Sydney has experienced consistently high levels of growth since the post war period, which has manifested into widespread urban sprawl and increasingly inadequate urban and transport infrastructure. Despite the changing needs of the city, particularly in the context of its more recent wider aspirations to be a global city, the predominant form of housing has remained largely unchanged since this time, ostensibly driven by demand. Planning around the aspiration to own a house on what is popularly known as the *quarter acre block*, dubbed the Great Australian Dream, continues unabated. This has resulted in a market led and largely passive approach to growth management within the city. As a result, property prices in the urban capitals have risen to well beyond the means of lower income households, who are driven progressively further towards the urban fringes and away from essential infrastructure.

The issue remains inadequately addressed in policy, supported by an unhelpful governmental structure. Much of the political rhetoric in Australia has validated this approach to housing, lobbied by private enterprise, branding it simply, 'the Australian way of life' and those financially struggling who are driven out to the urban fringes, the quasi-heroic terms of 'Aussie battlers' or 'aspirationalists'. Despite the clear need for a more proactive approach to managing growth, a fear of producing 'undesirable' and thus, unprofitable, housing has meant that many of the attempts at incorporating so-called smart growth strategies have been largely token or piecemeal in nature. This approach has impacted their effectiveness, also negatively impacting the image of higher density housing and urban consolidation efforts amongst Sydneysiders and Australians in general.

But are the residents of Australian cities really so different from urban dwellers elsewhere in the world? And why is residential happiness so directly tied to low densities?

The aims of this paper are two-fold: The first aim is to identify the connection between the housing aspirations of Sydneysiders, the origins of these aspirations and why aspirations have become and remained such a significant driver in the development and planning profile of the city. The second is to compare these findings against those of a selection of other cities around the world that are using both passive and proactive planning policies and the way in which such decisions have shaped these cities.

The study takes place against the theoretical backdrop of the New Urbanism and New Suburbanism movements, which occupy opposite ends of the thought spectrum on the perceived ideal levels of

governmental involvement and the prescriptiveness of policy. The ultimate aim of this paper is to determine whether the notion of the Great Australian Dream is still a relevant development and strategic planning driver for the future of Sydney.

## Methodology

In July 2012 the current NSW State Government released *A New Planning System for NSW Green Paper* (the Green Paper), which promises a “blueprint for change” based around four fundamental reforms in the areas of community participation, strategic focus, streamlined approval and provision of infrastructure. As a state planning proposal paper, it is qualitative rather than quantitative in terms of its proposals and non-specific in terms of its plans for Sydney as a unique urban region in NSW. It aims to follow the Metropolitan/Regional Growth Plans (p.10, p.26), the latest of which was The Metropolitan Development Program (2008/09). Produced by the previous government, it is the main planning instrument for the Sydney metropolitan area.

The Metropolitan Development Program and its associated paper, the Metropolitan Strategy Review: Sydney Towards 2036 Discussion Paper (2011) include data on the Local Government Areas which have experienced the highest levels of housing growth in the last ten years, including the areas in which this growth has been primarily in the form of detached, low density housing in Greenfield areas. Greenfield areas are an important parameter as development in these areas has materially contributed to the horizontal expansion of the city and the resulting strain on infrastructure. It has also contributed to the growing economic segregation within the metropolitan area, which has seen low income households driven progressively further towards the urban fringes by the rising costs of housing and away from essential amenities.

Each section of this paper will aim to address the new planning outcomes proposed by the Green Paper as the most recent of the planning instruments. Particularly in the context of its plans to review “international best practice for measuring the success of plans” (p.31), observations recorded in the cities visited for this paper, as well as in the conversations with local experts will be contextualised within the framework proposed by the Green Paper.

In order to measure and quantify the housing aspirations of the residents of Sydney, this study will make use of consumer segmentation analysis, a highly interrogated form of census and population data, which will determine the resident profile of the low density sprawl paradigm. The tool used for this assessment is a geo-demographic segmentation tool known as Mosaic, developed by Experian PLC<sup>1</sup>, which also offers a globally consistent classification system, known as Mosaic Global. There is currently Mosaic data available for 24 countries worldwide. Mosaic Global operates on the basis that the world's

---

<sup>1</sup> Experian PLC is a FTSE 100 listed company specialising in information services and data analytics. Its headquarter are in Dublin, Ireland and Nottingham, UK

cities share the same residential patterns – that is, that people everywhere are essentially the same and as a result, can be classified using a consistent taxonomy.

This is most helpful in enabling cross-comparisons across geographies. In the context of this study, once the resident profile of Sydney has been determined, the same groups of people will be examined in a selection of cities worldwide, employing both proactive and passive growth management strategies. The ultimate aim of this exercise is to determine the types of housing acceptable to the same types of households in other cities globally, and the contextual parameters that influence these choices. These parameters can then be assessed against the factors that drive housing choices in Sydney, and assist in the assessment of the Great Australian Dream as a relevant policy driver.

### **City selection process**

The four cities selected for this exercise are London, New York, Copenhagen and Detroit. According to Sydney's Metropolitan Strategy Review (2011), "The future of the Sydney region and more broadly the whole of New South Wales (NSW) is integrally linked to the success of Sydney as a Global City. The city's global status needs to be enhanced." (NSW Department of Planning and Infrastructure, p.7) According to the research carried out by a variety of global journals and research bodies such as the Foreign Policy Journal and the Global and World Cities Research Network on the topic of the nature of global cities, both London and New York consistently and invariably feature at the top of global cities indexes. This forms the basis of their selection for this study.

Copenhagen has also been selected as it is widely acknowledged to be the kind of city to which cities such as London and New York aspire, due to its highly successful urban planning mechanisms. Indeed, the term 'Copenhagenisation' is derived from the efforts undertaken by the city to progressively reduce its reliance on travel by private car, and improve the mobility of its residents through other means (most notably by bicycle). It was formally integrated into the spatial planning strategies of many global cities, including both London and New York.

The equivalent types to the types of households who are seen to be the primary market for detached housing on the urban fringes in Sydney are assessed in these three cities to determine the extent to which they make up the resident base of each, and the dwelling types which make up the housing norms for these types of households in each city.

Also as part of this study, one additional city adversely affected by the global economic downturn is assessed. In the United States, the advent of global economic crisis has brought the argument for better planned cities into relief as many middle-American towns and cities bear the brunt of the economic crisis. A notable example is the city of Detroit. Indeed the New York Times recently went so far as to say

that “it was predominantly the collapse of the car-dependent suburban fringe that caused the mortgage collapse.” (Leinberger, C. New York Times, 26<sup>th</sup> November, 2011)

This is not a phenomenon limited to the United States alone. Indeed, globally, cities most known for their so-called “market-led” urban planning have largely been those hit hardest by the economic collapse – Athens, Dublin and Madrid, the capitals of countries well known for their recessionary troubles, were all cited in a 2006 report as worst case examples of city planning long before the economic crisis. (Finfacts, 2006)

The determining factor behind the selection of the final city has been the quality of the available Mosaic data for each city option. It is most readily available in detailed and accurate form for the United States, and thus the city of Detroit has been selected. However, each city would be a worthwhile case study for further research and could perhaps aid in the identification of any potential links between economic volatility and the strategic planning of these cities.

By undertaking the outlined exercise, the aim is to demonstrate the potential impacts of market led housing strategies and conversely, of proactive growth management on the long term liveability and prosperity of the city. Most importantly, it contextualises the reasons behind the limited success of some of the smart growth strategy elements already being deployed in Sydney through this global examination.

The study has been supplemented by on the ground observations in Copenhagen, London and New York, advice and data provided by the team at Mosaic Global and input from the team at Gehl Architects in Copenhagen, David Higgins, Managing Director of Network Rail in the United Kingdom and Alexandros Washburn, Chief Urban Designer for the New York City Department of City Planning.

## Research

Much of the research around smart growth strategies is qualitative and theoretical. The most current, pertinent and practical research in this area in Australia has been carried out by the Grattan Institute, “an independent think tank focussed on Australian public policy, (which) aims to provide independent, rigorous and practical advice to improve policy outcomes” (Weidmann et al, 2011, p.1).

In 2011, the Grattan Institute published a series of research papers focussed on quantifying the demand and supply of housing in Sydney. They pointed out that there is a mismatch between housing supply and demand in Sydney and note that aspirations for new housing are invariably driven by the existing stock (Kelly et al, 2011a):

In short, many of the detached houses in the ... suburbs are a legacy of a time when Sydney (was a) different city. Today's stock reflects attitudes formed and decisions made under different conditions, some of which no longer apply (Kelly et al, 2011a, p.25)

This is an important point because changes to housing stock happen very slowly (Kelly et al, 2011a) but also because it is one of the most important factors in the perpetuation of the Great Australian Dream paradigm and consequently, detached housing sprawl:

As a general trend, due to an aging population (ABS, 2011) households are also shrinking in size (number of people per household) (Kelly et al, 2011b). However, higher density housing in Sydney still represents little more than a quarter of all dwellings (Darcy, M., 2008). It was also recently revealed that in 2009 Australia overtook the US in producing, on average, the largest houses in the world. (Johanson, S., 2011-08-22, smh.com.au) It is therefore a fair assessment of housing supply in the Sydney market to say that while households (number of persons per dwelling) are shrinking, houses themselves are growing in size.

## Chapter 1 – The Great Australian Dream and Sydney's Housing Quandary

*"Only the rich can afford to buy a house within 25km of the city"*

Andrea Dixon  
*Herald Sun Sydney*, 30th April, 1998

The concept of the Great Australian Dream emerged during the post war period and is traditionally associated with the ownership of a detached house on a so-called quarter acre block (approximately 1011 square metres), the unit of measurement by which the abundant vacant land around Sydney was hastily subdivided in the post war period to accommodate a growing population. The term itself was derived from the American Dream, which described a similar phenomenon in the United States in the late 1940s. With its origins during this formative period, the Great Australian Dream is indelibly marked on the Australian psyche as a cornerstone of Australian identity.

Sydney was endowed with a sophisticated and extensive heavy rail system relatively early in its life. Prior to the advent of the public transport system in 1851, the city was a compact walking city, a product of its inception during the Victorian era, with a mix of working class and middle class housing clustered within walking distance of commercial centres, shops and factories. As with the United Kingdom, with the arrival of a reliable public transport system, the upper and middle classes and even some better paid members of the working class, could now aspire to a house and garden in fresh country air. These new residential suburbs were built along train lines radiating out from the city centre. (Forster, 2010)

A segregation of suburbs developed but instead of concentric rings of increasing affluence as could be observed in London, Sydney and the other Australian cities were characterised by sectors of different social status, governed largely by the topography and the surrounding natural landscape. Areas of working class housing developed on the flat unattractive tracts of land, while upper and middle class suburbs emerged along the leafy foreshore, to the north of the harbour and east of the city and docklands. (Forster, 2010)

Notably, Sydney and the other Australian urban capitals were already characterised by the very large areas that the cities covered. Typical population densities were at 20-25 persons per hectare compared with over 200 for London (Frost, 1990). The reasons for this were manifold. Land was both abundant and cheap. There was very little heritage of pre-industrial housing and what little there was, existed in Sydney alone. Australian cities were commercial in nature and there was a consequentially large middle class. Even manual labour incomes were relatively high. (Forster, 2010)

About fifty percent of Australians were owner occupiers compared with only ten per cent of the British (Frost, 1990). Also, the bulk of the growth occurred after the introduction of public transport, which freed people from the need to live close to their workplaces, which was mostly in the city centre. It was the

combination of the above that allowed many city dwellers, many of whom originated from the United Kingdom to achieve what Frost (1990, p.44) has called “the Anglo-Saxon desire for the privacy of living in a suburban city”. It is this desire that has left an indelible mark on the Australian psyche as the most fundamental of lifestyle aspirations, over a century later.

## **Home Ownership and the Taxation System**

Census data from 1947 shows that in Sydney the level of home ownership was roughly what it had been since the nineteenth century in almost all of the capitals. Around 40 per cent of dwellings were owner occupied in Sydney. In 1961, this figure had risen to 68 per cent – an astonishing jump in just 14 years. These were some of the highest levels of home ownership in the world. (Forster, 2010)

The federal government policies greatly favoured owner occupation through a highly incentivised taxation system for home owners. Many home purchasers were able to obtain housing loans at greatly subsidised rates from the banks, and in addition to this, there were special schemes for the large number of returning servicemen. Even the so-called ‘normal’ interest rates were subject to tight controls. Overall, government policy made owner-occupation much more financially attractive than renting (Forster, 2010) Home ownership was all but synonymous with new, detached housing, and had become no longer a luxury but an expectation, as had car ownership. The low level of investment in the inner city suburbs, other than in the form of freeway infrastructure, had also helped to make the suburbs more desirable by comparison. Therefore, as Forster points out, “while Australian families may have freely chosen the suburban way of life, the circumstances, partly shaped by governments, had made it difficult for them to make any other choice”. (2010, p.25)

## **Sydney’s Housing Quandary**

While the famed quarter-acre block has been somewhat of an exaggeration for most Sydney households, housing blocks of 500 square metres and more have dominated housing development in the middle and outer ring suburbs developed since World War II. This subdivision and development of previously rural or vacant (so-called Greenfield) areas around Sydney has formed a large part of the accommodation strategy for Sydney’s growing population since the city’s inception, but escalated in particular since this period.

According to the most recent data from the Australian Bureau of Statistics, there are approximately 4.1 million residents in Sydney, in approximately 1.5 million dwellings. Almost 940,000 of these are detached houses which equates to 62.6% compared with a national average of over 75%. (Darcy, M., 2008)

While the release of land for detached development has slowed in recent years, there is an ongoing belief in both public and private enterprise that continued land subdivision should form at least part of

the ongoing housing strategy of the city, and this is reflected in the current metropolitan plan for the city, despite a recent planning history that abstractly acknowledges that this manner of continued growth is unsustainable. Gleeson attributes this abstraction to “generations of policymakers and public officials who simply have no idea how to design and implement collective solutions to the increasing array of problems thrown up by deregulated markets.” (2010, p.3)

This is a significant point for Sydney’s ailing transport system. Each state government’s tenure is accompanied by promises to improve rail networks in underserved areas, particularly on the urban fringes, only to find, once again, that the cost of running infrastructural services in such low density areas is prohibitive, no matter how it is funded. (Benson, S., [dailytelegraph.com.au](http://dailytelegraph.com.au), 2008-10-31)

Under environmental and economic pressures, and in response to the increasing prevalence of smaller households, the last two decades have seen a growing trend towards increasing the number of denser multi-unit apartment buildings. This, combined with changes to planning laws designed to address concerns over the environmental and economic costs of urban sprawl, resulted in a 30 per cent increase in the number of apartments in Sydney between 1996 and 2006. (Darcy, M. 2008)

However, even such incremental change in the housing profile of the city has engendered vehement protests from various quarters, both private and public sector, with the president of one community action group stating in a widely distributed report “Unless we are vigilant, high-density zealots will do their best to reverse centuries of gains and drive us back towards a Dickensian gloom.” (Recsei, T, “Save Our Suburbs” in *Demographia*, 2010) The reasons behind this apprehension are manifold, but as pointed out by Kelly et al:

Despite the easygoing bravado, Australians have a pronounced private streak. They don’t want their pleasure or pain heard by neighbours and resent being drawn into the daily lives (...) of those around them. Living in smaller, communally oriented spaces brings this fear to the forefront. (2011b, p. 12)

To contextualise this however, in general, unless policy changes are wholesale and committed to the overall vision of proactive growth management, the housing profiles of cities are slow to change (Kelly et al, 2011a). The enduring prevalence of the Great Australian Dream as a housing aspiration and development driver is at least partly determined by the fact that aspirations for new housing are invariably motivated by the existing stock (Kelly et al, 2011a), and thus the paradigm continues to perpetuate itself.

The public debate around housing in Australia is dominated by commentary on the price of a detached house and land package, and tends to focus disproportionately on one household type, that of young families...the only certainty seems to be that when people are asked to

choose anything they want, they typically say they'd like a large detached house near the centre of the city (Kelly et al, 2011a, p.4)

## **Affordability**

Australia's brief settlement history is largely one of metropolitan primacy. All of the Australian capitals are highly polarised by the cost of housing, but the expansive low density area of Sydney as well as its harbour and unique topography have cemented housing in Sydney as the key to great wealth for some and long term poverty for others.(Darcy, M., 2008)

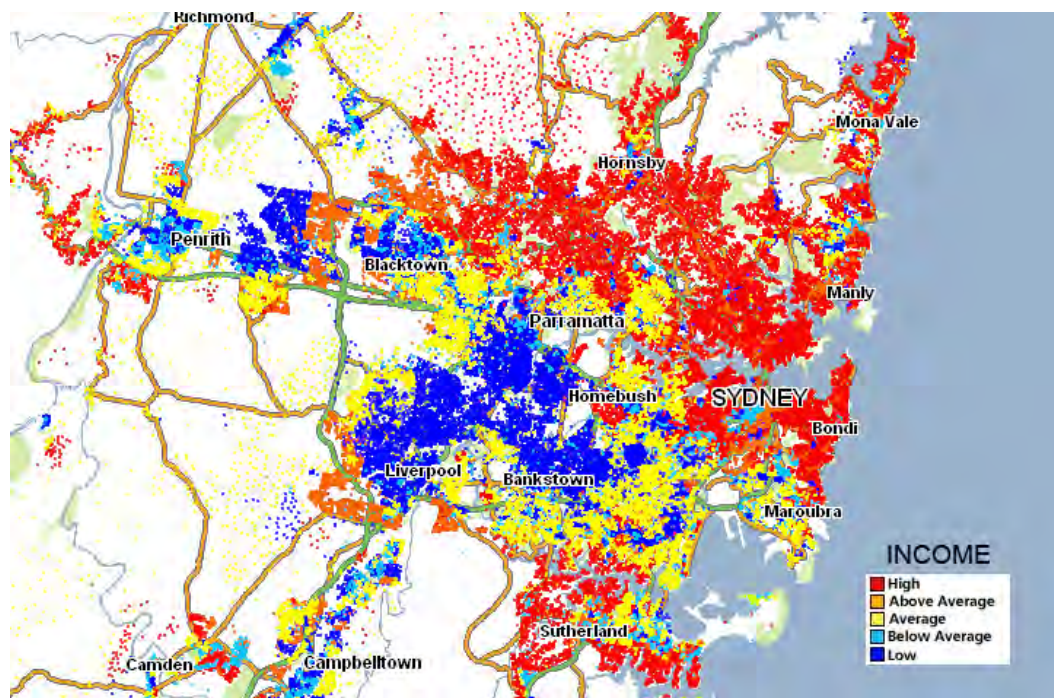
Sydney also has a much publicised 'crisis of affordability'. While it is undoubtedly the most expensive city in Australia to live in, much of the concern around this issue can be attributed to media induced panic drawn from reports such as the annual Demographia International Housing Affordability Survey. Demographia is a US based company, but the figures from this report are widely published in mass media in Australia in particular. In 2011, Sydney was ranked third on the table of Severely Unaffordable Housing Markets. Demographia's index sets a notional 'affordability standard' of 3 times the gross average household income which all major Australian cities exceed by at least a factor of two – but Sydney in 2011 was over three times the standard at 9.2 times the average national income.

However, this measure is a somewhat misleading benchmark, as incomes in Sydney also tend to be well over the median national household income. Interestingly, Demographia ascribes the lack of affordability in Sydney to the increased amount of prescriptive land use strategies and the recent limits on land releases imposed by the state government. This approach certainly implies that the primary form of housing development should be associated with governmental land releases, which for Sydney, is almost entirely Greenfield, and ignores the possibility of infill, or higher density development as a viable alternative. Due to its high levels of circulation in mass media, it is also materially contributing to the public's suspicion of smart growth strategies and higher density housing models.

## **Income versus housing type**

Another common misconception in Sydney is that detached housing is directly tied to high incomes, hence the *aspirational* nature of detached living in Australia. Figure 1.1 shows the map of Sydney colour coded by income, and highlights the highest income per annum by locality. On the basis of this information, coastal suburbs are the wealthiest and most prosperous, whilst the outer suburban areas are occupied by the lowest income bracket. It also shows a city that is made up mostly of extremes. The two predominant colour bands are High and Low and high income earners are clearly the most prevalent type. Sydney is, for a large portion of the population, a wealthy city.

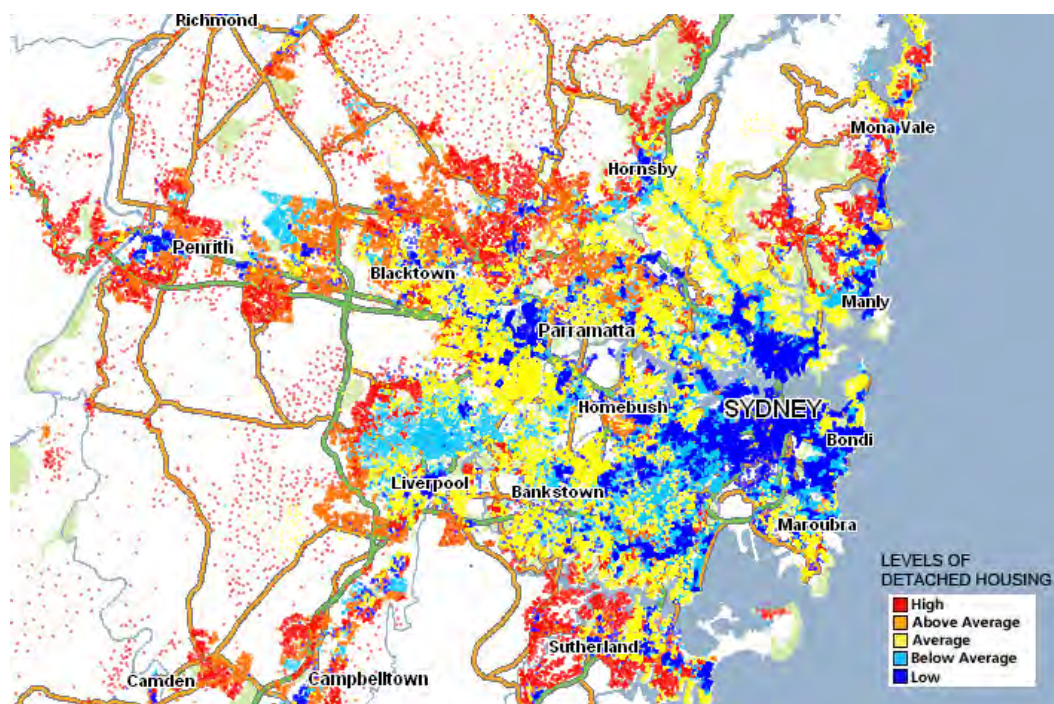
Figure 1.1 – Households by Income in Sydney



Source: Pacific Micromarketing Mosaic Australia Profiles 2008 – Balancing the Books> Household Income Per Annum>High Earnings

The map in Figure 1.2 shows the way in which detached housing is currently arranged in Sydney. It clearly shows a bias towards high levels of separate housing on the urban fringes with gradually declining levels towards the city centre.

Figure 1.2 –Detached Housing in Sydney



Source: Pacific Micromarketing, Mosaic Australia Profiles 2008 – Living Space>Housing Type> Separate Housing

As mentioned earlier, the average percentage representation of detached housing in Sydney is 62.6%. It indicates that the distribution of wealth is not necessarily directly aligned with regions high in detached housing representation. While there is an over-representation of detached homes on the urban fringes, housing in these areas also corresponds directly with economic disadvantage. This is mainly because residents with adequate financial capacity will generally make their housing decisions based on the desirability or centrality of the location as opposed to whether or not the house is detached. It would therefore stand to reason that the Great Australian Dream and its manifestation of detached housing on the urban fringes is largely associated with and marketed to the economically disadvantaged.

While the Great Australian Dream remains a significant cornerstone of Australian identity, in the Sydney of today, the expectations arising from it have been a difficult obstacle to overcome for policy makers. This is partly fuelled by media induced panic based on simplistic data that has tended to attribute lack of affordability to a shortage of land supply rather than an oversupply of houses that are too large and thus too expensive for households that are shrinking in size.

## Chapter 2 – The theoretical context: New Urbanism and New Suburbanism

*"Cities are an immense laboratory of trial and error, failure and success, in city building and city design. This is the laboratory in which city planning should have been learning and forming and testing its theories."*

Jane Jacobs, *The Death and Life of Great American Cities*, 1961

This chapter aims to contextualise this study within the theoretical framework of New Urbanism and its more recent counterpart New Suburbanism. Both schools of thought focus on the development of cities that directly address the housing and ultimate aspirations of its residents. Both emerged in the United States.

New Urbanism aims to address growth and the housing challenge by focussing on increasing densities, urbanising sprawling suburban areas and building better designed and smaller dwellings which are closer to the urban core.

New Suburbanism focuses on maintaining low density housing and decentralisation, allowing development to take the form driven by the market. It was developed largely as a response to the increase in influence of the New Urbanism movement which has enjoyed growing uptake and advocacy of its principles amongst local governments across the United States.

The New Urbanism movement emerged in the United States in the 1980s but its origins lie in as far back as the early 1960s, with Jane Jacobs' seminal *The Death and Life of Great American Cities* (1961). Since then, a multitude of papers, books and publications have been devoted to the topic of New Urbanism or, as known in the Australian context, *urban consolidation* or *smart growth*.

The movement has slowly reformed property development and urban planning, particularly in the United States, with its advocacy of walkable neighbourhoods, higher densities and mixed use, and the reduction of sprawl, automobile dependency and single-use neighbourhoods.

New Urbanism also advocates a stronger public transport network and walkability. In areas where its principles have been applied, such as New York City and Copenhagen, lanes of traffic have been removed to be replaced by public open spaces, expanded sidewalks and cycle paths. The aim of these principles is above all else, to reduce reliance on travel by private car, but also has the added benefit of making the streets safer for pedestrians, cyclists and even motorists, by slowing down and reducing traffic in urban areas. It must be noted that in Sydney, some of these principles have been applied with the introduction of cycle paths in the urban core and there is an intention to incorporate more wholesale strategic principles (NSW Department of Planning and Infrastructure, 2008/09). The first and most significant of these steps has been the limitation of land release on the urban fringes, outlined in the following chapter.

New Urbanism also aims to address deeper social ills such as the segregation of society by income. As pointed out by Duany et al, "the rich have often taken refuge from the poor but never with such precision" (2010, p. 43). Indeed, consumer segmentation and geo-demographic assessment tools have made it possible and simple to see these segregations in existing settlements, but many suburban developers actually set out to develop economically divided enclaves within subdivisions in an attempt to sell the concept of exclusivity. By making incremental adjustments to the physical forms of cities, and planning out segregation, New Urbanists argue that a wide variety of incomes, races and classes can live in harmony within a small geographic footprint. This measure also attempts to ensure that the poverty cycle is not perpetuated and enclaves of poverty do not develop.

The same sidewalks, the same parks, and the same corner store serve everyone from the C.E.O. to the local librarian. Sharing the same public realm, these people have the opportunity to interact, and thus come to realize that they have little reason to fear each other. (Duany et al, 2010, p. 47)

The counter movement to New Urbanism, The New Suburbanism, emerged in 2005, with a paper prepared by Joel Kotkin and the US based The Planning Centre entitled "*The New Suburbanism: The realists guide to the American future*". The challenge both movements are addressing is universal – the challenge of housing future growth, which regardless of geography appears to be 40 - 50% growth by 2030 (UN Population Fund et al, 2007). However, the context within which New Suburbanism is operating is almost entirely and unabashedly US-centric.

Projections for expansion of the built environment — estimated to grow 50 percent by 2030 — will be in the suburbs and exurbs, most particularly in sprawling, lower-density and auto-dependent cities of the South and West... This can best be done, not by rejecting the suburban ideal—which would violate the essential desires of most Americans — but by crafting ways to make it work in a better, more efficient and humane way.(Kotkin et al, 2005, p.1)

New Suburbanism argues for a diluted version of many New Urbanist principles but without, amongst other things, what it calls a "zealous commitment to mass transit" (Kotkin et al, 2005, p.19) While New Suburbanism may be the lesser known movement of the two, upon examination of sprawling cities, its principles are more widely adopted in cities with more passive planning strategies, including Sydney. Its principles closely mirror the viewpoint of the afore-mentioned Demographia report, which argues for so-called '*pro-choice*' urban development – in other words, market led development.

The reason for this is simply that it adheres to the economic framework of developers and private enterprise, and in many ways, takes the path of least resistance when confronted with obstacles, planning, geographical, market or otherwise.

This type of 'let the market decide' planning was mentioned in the European Environment Agency's 2006 report on Dublin as a worst case scenario of urban planning practices:

Ronan Uhel, who heads the EEA's spatial analysis unit, is reported in The Irish Times as saying that Ireland was 'very much on the map in relation to urban sprawl - not just in Dublin, but also around towns and villages throughout the country' as a result of 'extremely passive' planning policies. (Finfacts, 2006)

There is proof in the outcomes of cities like Dublin that this passive approach to urban planning only creates further problems. At best, this is because the founding principles tend to be misconstrued and manipulated by developers to maximise profits, and allowed at a local government level to achieve local and not metropolitan objectives.

There is evidence in the widely adopted framework of New Urbanism that the provision of dwellings at higher densities does not have to manifest into a "relentless stomp of grey concrete and asphalt...of drab shadows of upward rising, smothering unit blocks" (Demographia, 2010). Indeed, the aims of New Urbanism are to counteract the monotony and single use zoning associated with residential subdivisions to promote diversity, integration and a ultimately, a richer urban experience. However, as Kotkin points out, the case must be made for the persistence of the 'universality' of the aspiration to own your own home. The real challenge is to determine whether the forces which perpetuate this trend are entirely market driven or a combination of policy, funding and market assumptions.

## Chapter 3 – Sydney in a Globalising Context

*"the concept of 'global city' or 'world city' ... can be interpreted as a means of trying to legitimise what are for many people painful economic-social dislocations"*

Frank Stillwell, *Globalisation and Cities: An Australian Political Economy Perspective*, 1997

There is an inherent dichotomy in Sydney's urban identity. It is important to understand that Australian cities are primarily residential environments, with very small urban cores surrounded by vast expanses of suburban sprawl (Forster 2010). In Sydney, alongside a yearning for a low density, suburban, almost provincial existence, there is also a pride in the city's status as the most cosmopolitan of the Australian capitals, and a keenness to promote Sydney as a world city. Indeed, in the most recent metropolitan plan for the city, Sydney was defined by the New South Wales State Government as Australia's only truly global city (Department of Planning and Infrastructure, 2010, p.7)

Stillwell defined globalisation as "the intensification of international economic connections" (1997, p.7) in the closely related areas of finance, trade, investment and production (Forster, 2010). The effects of globalisation have seen Sydney become Australia's key financial control centre with finance, insurance, property and business services the largest single employment category in Sydney. (Forster, 2010) In terms of lifestyle, the pride in the city's cosmopolitan identity perhaps arises from the fact that the globalisation of Australian cities has meant that the cities have become "less inward looking and parochial and perhaps more exciting to live in" (Forster, 2010, p38). The rise of the private sector has had a profound impact on the way in which development is funded and approved and the globalising context in which this is occurring is facilitating and enabling this trend. Importantly, this is not a new trend, nor is it unique to Australia.

In the developed world, the global financial markets are driven by growth, often at any cost (Gleeson, 2010). In the context of the United Kingdom, for example, Bowie (2010) noted in reference to the tenure of the first Mayor of London, Ken Livingstone, "the private sector was an integral part of the pro-growth consensus.... This helped to ensure that the growth-based plan was endorsed, and that they were prepared, if reluctantly, to live with some of the mayoral policies which were less in their favour" (p. 63) The United States is certainly no different, widely credited with pioneering this market-led enterprise.

The aspiration to cement Sydney's global status is in pursuit of increased levels of opportunity for global business. In order to define whether this macro desire is in line or at odds with the micro housing desires of the population (as defined by the cultural doctrine of the Great Australian Dream), a series of global cities have been selected for the purposes of comparison with Sydney. There is no doubt that Sydney is now a world city and Sydney's ascent into the global housing and property markets has introduced forces which seem at odds with the cultural ideals and notions associated with housing in Australia.

## The role of government

There are three layers of government in Australian cities – Federal, State and Local. In Sydney, the metropolitan region is governed holistically only at the state level. The NSW State Government has set broad guidelines of strategic direction for the city, which include housing provision targets, which are then executed at a local government level through the consents granted by the local councils. According to the Metropolitan Development Program, Sydney is forecast to grow a further 40% in population in the next 25 years, as indicated in Table 3.1 and Figure 3.1. This population growth will see the city grow to a total of nearly 6 million people. Furthermore, it is expected that by 2036, one in six people will be aged over 65 compared to the current proportion of one in eight. (NSW Department of Planning and Infrastructure, 2008/09)

Table 3.1 – Forecast Population Growth in Sydney's subregions

SUBREGION	2006 POPULATION '000	2036 PROJECTED POPULATION '000	2008-2036 POPULATION INCREASE '000	CHANGE %
<b>SOUTH WEST</b>	410.5	874.8	464.3	<b>113.1</b>
<b>SYDNEY CITY</b>	165.6	264.8	99.2	<b>59.9</b>
<b>NORTH WEST</b>	761.1	1,155.6	394.5	<b>51.8</b>
<b>INNER WEST</b>	227.4	307.0	79.6	<b>35.0</b>
<b>WEST CENTRAL</b>	679.6	896.6	217.0	<b>31.9</b>
<b>INNER NORTH</b>	302.9	378.9	76.0	<b>25.1</b>
<b>NORTH</b>	261.9	321.2	59.3	<b>22.6</b>
<b>NORTH EAST</b>	235.0	277.0	42.0	<b>17.9</b>
<b>EAST</b>	281.8	334.0	52.2	<b>18.5</b>
<b>SOUTH</b>	651.4	747.6	96.2	<b>14.8</b>
<b>CENTRAL COAST</b>	304.7	424.7	120.0	39.4
<b>SYDNEY</b>	<b>4,282.0</b>	<b>5,982.1</b>	<b>1,700.1</b>	<b>40%</b>

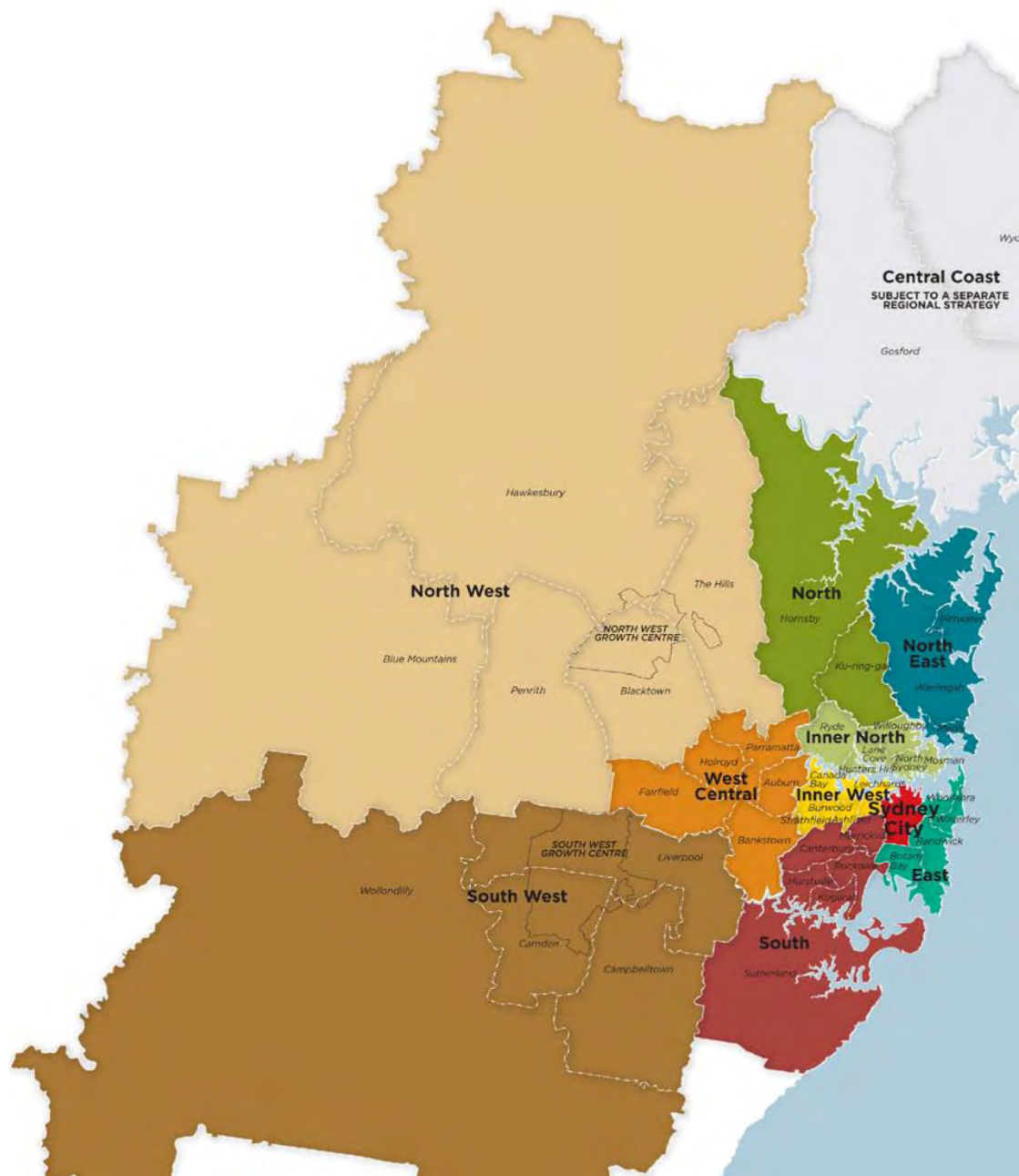
SOURCE: HISTORICAL DATA—AUSTRALIAN BUREAU OF STATISTICS; PROJECTIONS—DEPARTMENT OF PLANNING

Source: NSW Department of Planning and Infrastructure, 2011, Sydney Towards 2036, Metropolitan Strategy Review Discussion Paper, Sydney, p.11

As far as housing is concerned, the current metropolitan plan for Sydney is the Metropolitan Development Program (MDP) 2008/09. This is the second iteration of an earlier plan from 2005, the first of its kind that addressed Sydney as a whole since the 1940s. According to NSW State Government:

The MDP is the Government's key program for tracking and managing housing supply and covers major infill sites in existing urban areas as well as the release of land not previously urbanised, known as Greenfield areas, typically on the metropolitan fringes. (NSW Department of Planning and Infrastructure, 2009)

Figure 3.1- Sydney's Ten Subregions



Source: NSW State Government, 2011, Sydney Towards 2036, Metropolitan Strategy Review Discussion Paper, Sydney, p.11

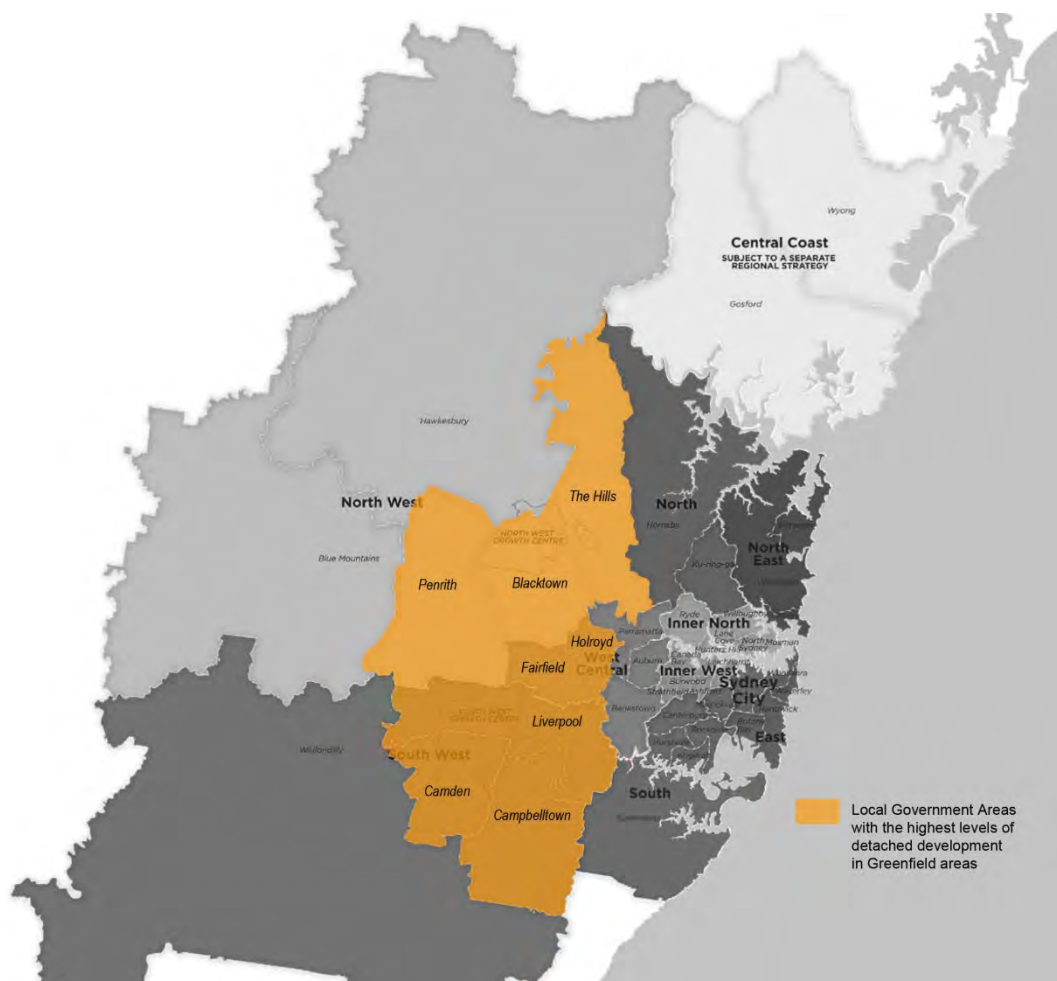
### Development in Greenfield areas

In the last ten years, development in Greenfield release areas accounts for the production of around 25% of all development in the Sydney region (NSW Department of Planning and Infrastructure, 2008/09). The highest levels of detached dwelling development in Greenfield areas in the Sydney region are concentrated in eight Local Government Areas (LGAs): The Hills, Blacktown, Penrith, Campbelltown, Liverpool, Camden, Fairfield and Holroyd. Figure 3.2 shows the location of these LGAs, indicated in orange. Together these eight LGAs account for over three quarters of all Greenfield

development in Sydney. It is this type of development that is mainly responsible for the horizontal expansion of the city, and the resulting strain on transport and services infrastructure.

In chapter 4, the residents of these areas will be examined via geo-demographic segmentation analysis as it is the purchasers of the homes in these areas to whom the Great Australian Dream paradigm is most desirable and important. Developers and policy makers are primarily looking to these groups when preparing accommodation strategies for the city. Similarly, the purported demand for detached housing and the Great Australian Dream is typically geared towards the types of residents who favour development in these areas due to the lower land prices.

**Figure 3.2 – Highest levels of detached housing in Greenfield development areas by LGA**



Source: adapted from Local Government Areas summary report in the NSW State Government Metropolitan Development Program 2008/09

### **Metropolitan Plan for Sydney**

In 2005, the NSW State Government released a twenty five year metropolitan strategy called City of Cities: A Plan for Sydney's Future. The strategic target date for the implementation of the plan was 2031. Forecast growth for Sydney at the time for this year was a growth in population of 1.1 million to 5.3 million in 2031. In 2010 a revised Metropolitan Strategy Review was released with a revised end

date of 2036. This was partially due to the fact that little headway had been made in the last 5 years in achieving the targeted outcomes. Indeed the new metropolitan plan laid out the aims, measures and benchmarks of 2005 against their performance by 2010 in Table 3.2, indicating that out of the six key areas of improvement, only one had improved, while the other five areas had worsened.

**Table 3.2 – Metropolitan Strategy Performance – Measures of Success**

2005 Aim	Measure	Benchmark	2010 Metropolitan Review
<b>Enhance Liveability</b>	<b>Quality of Living</b> Maintain or improve Sydney's index and ranking of quality of living, according to Mercer Human Resource Consulting global quality of living survey	In 2005 Sydney ranked 8 out of 260 cities in the Quality of Living Survey with an index of 105.	In 2009 Sydney ranked 10 out of 215 cities in the Quality of Living Survey, with an index of 106.3.
<b>Strengthen Economic Competitiveness</b>	<b>Contribution to National Economy</b> Maintain or increase the proportion and value of Sydney's contribution to Gross Domestic Product (GDP).	In 1998-99, Sydney produced 23% of Australia's value added wealth, totalling \$130 billion.	In 2009 Sydney's contribution to GDP had increased to 24.9%.
<b>Ensure Fairness</b>	<b>Access to Services</b> Increase the percentage of the population living within 30 minutes by public transport of a city or major centre.	In 2005, 80% of Sydney residents can access a major centre, regional city or global Sydney within 30 minutes by public transport.	This measure remains comparable but is set to improve with the implementation of the Metropolitan Transport Plan
<b>Protect the Environment</b>	<b>Environmental Footprint</b> No increase in Sydney's environmental footprint per capita.	In 1999, the environmental footprint of Sydney's residents was 6.67 hectares per person (adjusted).	In 2004 Sydney's environmental footprint had increased to 7.21 hectares per person.
<b>Improve Governance</b>	<b>Metropolitan Strategy and Infrastructure</b> Metropolitan Strategy directions and identified transport and infrastructure needs inform the annual State Infrastructure Strategy	Budget Paper 4 responds to transport and infrastructure priorities as identified in the State Infrastructure Strategy.	Improved integration of strategic land use planning and infrastructure is the focus of this review.

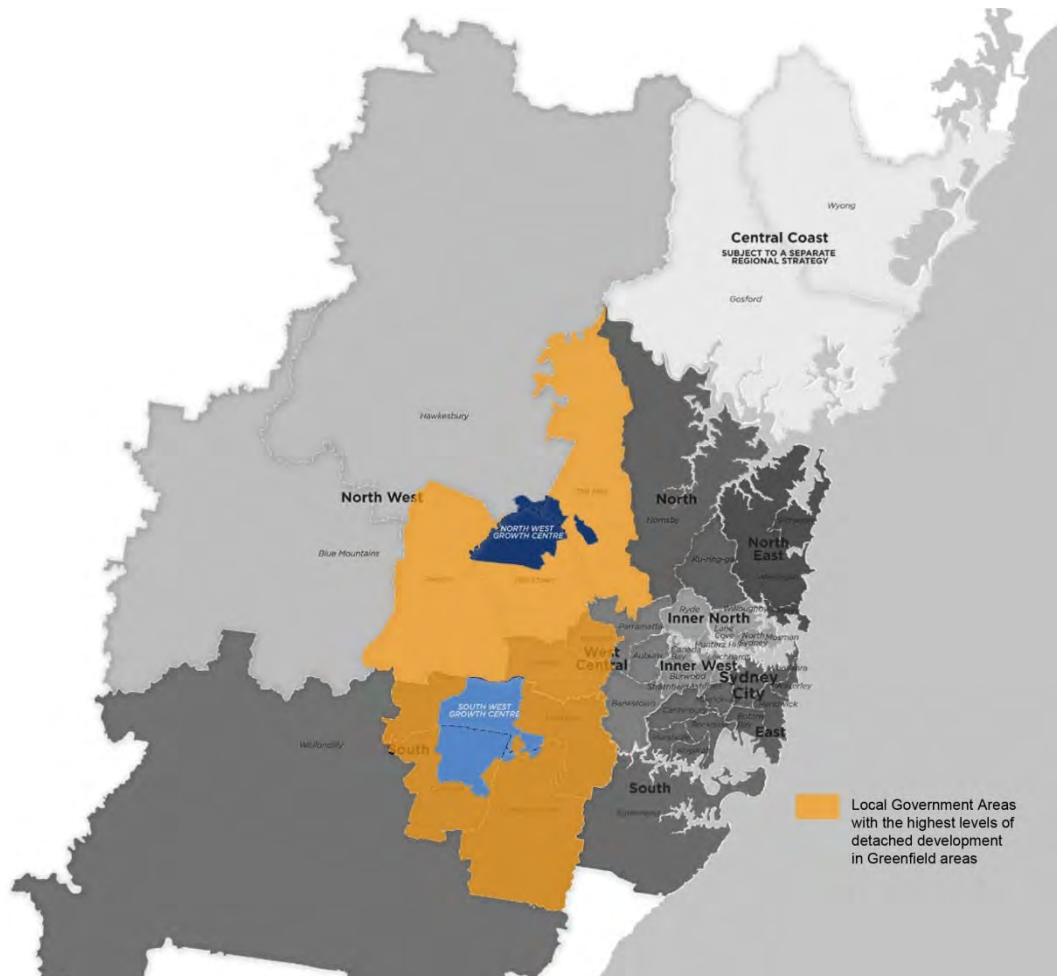
Source: NSW State Government, 2011, Sydney Towards 2036, Metropolitan Strategy Review Discussion Paper, Sydney

The current revision of the plan, the Metropolitan Strategy Review: Sydney Towards 2036 (2011) has put in place a series of revised targets with an extended end date. Forecast growth has been revised according to more recent census data, and for the next 20-25 years was found to be even greater than that allowed for in the 2005 plan. In order to accommodate this growth, the plan is targeting over 550,000 new jobs, with around half of these jobs to be based in Western Sydney and a target of 640,000 new homes with 70% in existing areas and 30% in new Greenfield areas.

Concurrently, the plan aims to "contain Sydney's urban footprint by protecting rural and resource lands and only releasing land for development that meets strict sustainability criteria." This new Greenfield development is to be focussed only in the so-called North-West and South-Western Growth Centres.

Figure 3.3 shows the location of the two areas for growth, in relation to where the majority of Greenfield development has taken place in recent years as taken from Figure 3.2.

Figure 3.3 – North Western and South Western Growth Centres in Metropolitan Sydney



Source: adapted from Metropolitan Strategy Review, Department of Planning and Infrastructure, 2010, pg 5 and NSW Government Planning and Infrastructure, 2010, Growth Centres Commission, <http://www.gcc.nsw.gov.au/the+growth+centres-5.html>

The growth centres together are expected to accommodate 181,000 new dwellings as well as land for employment in a bid to decentralise the employment opportunities in the city. Developers have criticised this strategy as the areas identified are subject to a number of constraints including multiple land ownership and lack of existing infrastructure, making development in these areas difficult and expensive. The main aim of the MDP is to attempt to curb the sprawling trend by targeting specific areas in which 'lot production' can occur. From the findings thus far, it can be easily surmised that the majority of Sydney's growing pains can be attributed to its sprawling size, a direct result of the prevalence of the detached housing paradigm as the predominant form of development. The reason for identifying two growth areas is an attempt to ensure that the sprawl does not continue to grow via lot production beyond the already bloated confines of the city.

## Global Comparison

In order to understand the needs of global cities, a small subset was selected for cross-comparison with Sydney on the basis of a number of criteria. The first of these criteria is global significance. As previously indicated, this is an important yardstick, as it is a measure by which the primary planning instrument for the Sydney region, the Metropolitan Development Program is measuring its success. All of the cities subject to this study, therefore, are cities that feature in the table below.

Table 3.3 – Global Cities Index 2010

Alpha ++	London, New York City
Alpha +	Hong Kong, Paris, Singapore, Tokyo, Shanghai, Chicago, Dubai and Sydney
Alpha	Amsterdam, Beijing, Brussels, Buenos Aires, Frankfurt, Jakarta, Kuala Lumpur, Los Angeles, Madrid, Mexico City, Milan, Moscow, Mumbai, San Francisco, São Paulo, Seoul, Toronto and Washington
Alpha -	Atlanta, Bangkok, Barcelona, Boston, Dallas, Dublin, Istanbul, Johannesburg, Lisbon, Melbourne, Miami, Munich, New Delhi, Philadelphia, Santiago, Taipei, Vienna, Warsaw and Zurich
Beta+	Athens, Bangalore, Berlin, Bogota, Cairo, Copenhagen, Düsseldorf, Hamburg, Houston, Manila, Montreal, Prague, Rome, Stockholm, Tel Aviv and Vancouver
Beta	Auckland, Beirut, Bucharest, Budapest, Cape Town, Caracas, Chennai, Guangzhou, Ho Chi Minh City, Karachi, Kyiv, Lima, Luxembourg, Manchester, Minneapolis, Montevideo, Oslo, Riyadh and Seattle
Beta-	Abu Dhabi, Birmingham, Bratislava, Brisbane, Kolkata, Calgary, Casablanca, Cleveland, Cologne, Denver, Detroit, Geneva, Guatemala City, Helsinki, Lagos, Manama, Monterrey, Nicosia, Osaka, Panama City, Perth, Port Louis, Rio de Janeiro, San Diego, San Juan, Shenzhen, Sofia, St. Louis and Stuttgart
Gamma+	Adelaide, Amman, Antwerp, Baltimore, Belgrade, Bristol, Charlotte, Cincinnati, Doha, Edinburgh, Glasgow, Hanoi, Hyderabad, Jeddah, Kuwait, Lahore, Nairobi, Portland, Riga, San José, San Jose, Tunis and Zagreb
Gamma	Almaty, Columbus, Edmonton, Guadalajara, Indianapolis, Kansas City, Leeds, Lyon, Phoenix, Pittsburgh, Quito, Rotterdam, San Salvador, Santo Domingo, St. Petersburg, Tampa, Valencia and Vilnius
Gamma-	Accra, Austin, Belfast, Colombo, Curitiba, Durban, George Town, Gothenburg, Guayaquil, Islamabad, Ljubljana, Marseille, Milwaukee, Muscat, Nagoya, Orlando, Ottawa, Porto, Porto Alegre, Pune, Richmond, VA, Southampton, Tallinn, Tegucigalpa, Turin and Wellington

Source: adapted from Globalisation and World Cities Study Group and Research Network, Research Bulletin 369 , Loughborough University, UK, 2010 <http://www.lboro.ac.uk/gawc/world2010.html>

On the Global and World Cities 2010 roster, Sydney is featured among eight cities deemed to be its equals or greater in terms of its global significance as a Global or World City. In this roster Sydney is categorised as an Alpha Plus city and among the top ten cities in the world. In similar studies, Sydney features consistently among the top ten, though invariably between eighth and tenth. The criteria for these assessments are based on the following series of measures encompassing economic, political, cultural and infrastructural characteristics, shown in Table 3.4.

**Table 3.4 – Characteristics of Global Cities**

Economic Characteristics	Political Characteristics	Cultural Characteristics	Infrastructural Characteristics
<ul style="list-style-type: none"> <li>Costs of living and personal wealth</li> <li>Financial services provision – banks and accountancy</li> <li>Corporate headquarters for multi-national corporations, international financial institutions, law firms, conglomerates and stock exchanges that have influence over the world economy</li> <li>Significant financial capacity and output – city and regional GDP</li> <li>Stock market indices/market capitalisation</li> </ul>	<ul style="list-style-type: none"> <li>Active influence on and participation in international events and world affairs</li> <li>Hosting headquarters for international organizations (World Bank), NATO headquarters</li> <li>A large proper, population of the municipality (the centre of a metropolitan area, typically several million) or agglomeration</li> <li>Diverse demographic constituencies based on various indicators: population, habitat, mobility and urbanisation</li> <li>Quality of life standards or city development</li> <li>Expatriate communities</li> </ul>	<ul style="list-style-type: none"> <li>International, first-name familiarity</li> <li>Renowned cultural institutions (often with high endowments), such as notable museums and galleries, notable opera, orchestras, notable film centres and theatre centres</li> <li>Several influential media outlets with an international reach</li> <li>A strong sporting community, including major sports facilities, home teams in major league sports, and the ability and historical experience to host international sporting events</li> <li>Educational institutions</li> <li>Sites of pilgrimage for world religions</li> <li>Cities containing World Heritage Sites of historical and cultural significance</li> <li>Tourism</li> </ul>	<ul style="list-style-type: none"> <li>An advanced transportation system that includes several highways and/or a large mass transit network offering multiple modes of transportation (rapid transit, light rail, regional rail, ferry, or bus)</li> <li>Extensive and popular mass transit systems, prominent rail usage, road vehicle usage, major seaports</li> <li>A major international airport that serves as an established hub for several international airlines</li> <li>Airports with significant passenger traffic and international passenger traffic or cargo movements.</li> <li>An advanced communications infrastructure on which modern trans-national corporations rely, such as fibre optics, Wi-Fi networks, mobile phone services, and other high-speed lines of communications.</li> <li>Health facilities;</li> <li>Prominent skylines</li> <li>Cities' telephone and mail services, airport flights-range, traffic congestion, availability of water, train facilities, nearby parks, hospitals, libraries, police stations, etc.</li> </ul>

Source: adapted from Globalisation and World Cities Study Group and Research Network, Research Bulletin 369 , Loughborough University, UK, 2010 <http://www.lboro.ac.uk/gawc/world2010.html>

The first two cities are London and New York, due to their primacy on the global cities index. With both cities at the top of the global cities index, an assessment of the policy framework of each is carried out to define the kind of aspirations that cities such as London and New York have, when both have achieved ultimate global significance status and secured the global opportunities that accompany this status.

Jan Gehl, the urban planning consultant behind many of the strategic planning ideals upon which the Copenhagen city plan is founded, has in recent years been engaged by the planning departments of both London and New York in order to 'Copenhagenise' their cities. Copenhagen will serve as a

bookend study on the New Urbanism, as the embodiment of the kind of planning outcomes to which a global city can aspire.

As Sydney's planning history thus far has been largely passive, it is important to assess a city that has demonstrated its commitment to industry or market led, passive planning measures. As the strategic planning, culture and lifestyle of New York is not typical amongst American cities, and suburban sprawl is, an additional American example has been selected in the city of Detroit, Michigan.

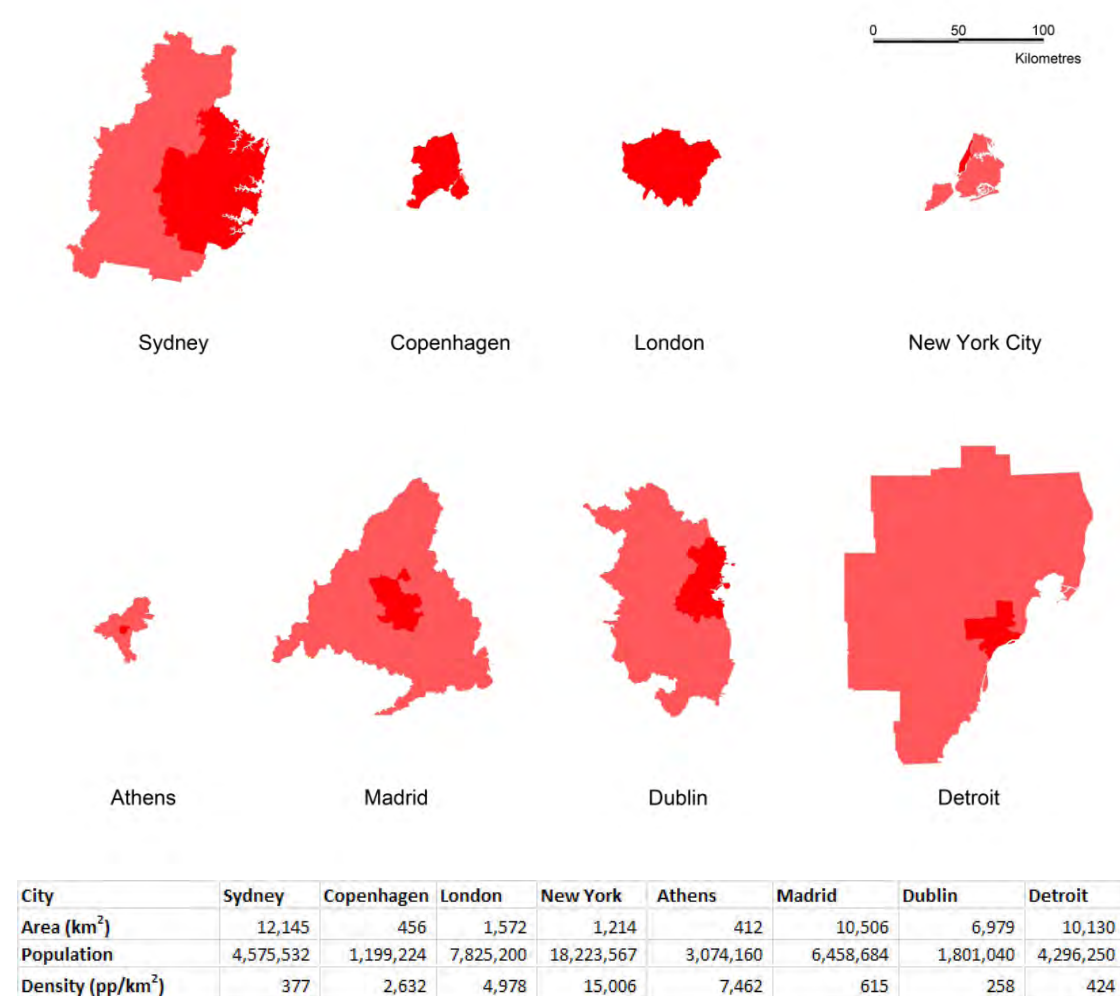
Detroit's decline during the economic downturn and indeed the years preceding it have been recently well publicised. It is an interesting counter study for Sydney for its wholesale commitment to its industry led planning model, which is largely aligned with many New Suburbanist principles. The assessment of Detroit will serve as a bookend study on the New Urbanism – New Suburbanism thought spectrum.

The ultimate aim of the selection process is to enable a like for like comparison of both lifestyles and housing models in cities which are readily comparable in terms of their cultural and financial primacy in their respective countries. This paves the way for a fair assessment that takes into account the complexity of the issues facing each city.

Finally to contextualise Sydney amongst the group of cities mentioned in this study, Figure 3.4 shows the current area of Sydney at the same scale alongside the other global cities. The delineations have been made based on the boundaries of each city. In some cases, the delineations are clear, as with London, New York and Copenhagen. With others, the boundaries are ill defined but the distinction has been made on the basis of the furthest point from the city in which one can live, and still be considered to be living in that city. The four cities selected for this study are included alongside Athens, Madrid and Dublin, mentioned earlier in the paper as examples of passive urban planning.

The darker red area shows the confines of the traditional boundaries of the metropolitan area. The lighter red area shows the exurbs primarily dependent upon the metropolitan city proper.

Figure 3.4 – Global Cities by Area and Density



Source: adapted from Google Maps 2011, Sydney data from Australian Bureau of Statistics 2011, Copenhagen data from Statistics Denmark 2011, New York and Detroit data from U.S. Census Bureau 2009, London data from Office for National Statistics 2010, Athens data from World Gazetteer Metro Pop: Athens, Madrid data from Instituto Nacional de Estadística 2011, Dublin data from Irish National Census 2006

At a glance the diagram shows Sydney to be physically similar in size to Dublin, Madrid and Detroit, all cities noted for their passive urban planning. Sydney has the largest core metropolitan area and the second lowest population density after Dublin. Additionally, it can be surmised from the examples assessed in this paper, that well functioning cities are generally contained within a 20-25km radius. The following chapters will assess the planning and policy frameworks of each city against the housing aspirations of its residents.

## Chapter 4 – Consumer Segmentation and the Control Group

*“During the late 1990s a new name appeared for a class of go-getters: the ‘aspirational’... The aspirational moved in waves from stodgy blue-collar suburbs in the big cities out to the McMansion frontier, where behaviour, as well as buildings was masterplanned.”*

Brendan Gleeson, *Lifeboat Cities*, 2010

This chapter will identify the types of households who contribute to the largest percentage of uptake of the Great Australian Dream and therefore the sprawl paradigm in Sydney – that is, detached dwellings on the urban fringe. The relevant types are identified through a process known as geo-demographic segmentation. It is important to assess these types as opposed to all types living in detached dwellings as they are the signifiers of the ongoing demand for the development of detached housing and hence, further subdivisions. The equivalents to the same types of residents are then defined in each of the global case studies to find out how residents who are aligned in terms of lifestyle and aspirations live in each city.

### The control group

In order to identify similarities between groups of people in cities around the world, a control group must be identified. In the case of the Australian capitals, the characteristics attributed to the control group are entrenched within the popular image of the Great Australian Dream. One term widely used in recent political rhetoric and in industry is the *‘aspirational’*. The aspirational form a part of the category of households who share in the biggest percentage of uptake in developments on the urban fringes of the capitals, and who share many common characteristics with the control group subject to this study. In Australia, developers spend much time and resources identifying this category of people, where they come from, what they value and most importantly, how they want to live.

Firstly, the way in which people live in Sydney today is assessed. The method selected for this analysis is heavily reliant on so-called consumer segmentation analysis. Consumer segmentation “is the process of classifying people into groups that have some set of similar characteristics, resulting in the ability to be studied and targeted” (XTREMEimpakt, 2008). One of the most comprehensive and widely used global consumer segmentation tools is Experian’s Mosaic.

### What is Mosaic?

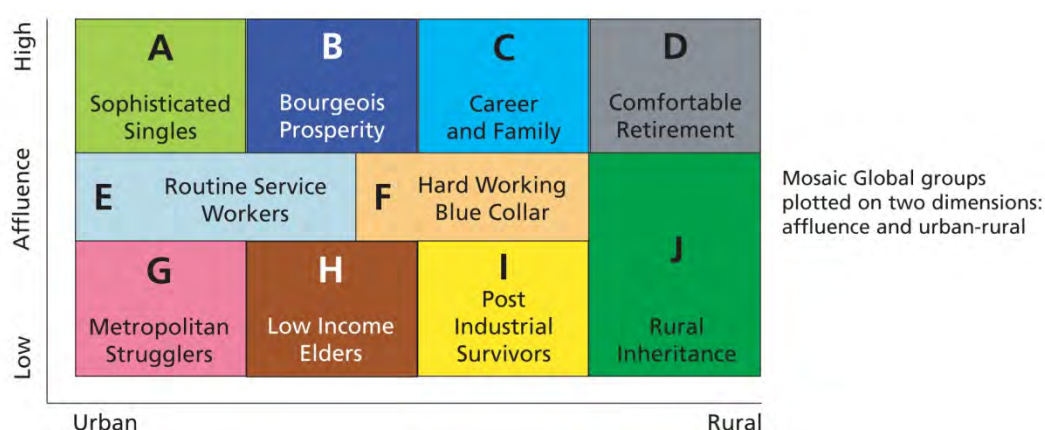
Mosaic is one of a number of geo-demography tools currently used globally by marketers for so-called *micro-marketing* purposes. The information within is both geographically accurately mapped and highly detailed, drawn in major part from census information, and supplemented by regular information drives, mostly carried out through retailers. Though not its primary function, it is, on occasion, used by developers as part of their development and sales strategies to understand the ‘hearts and minds’ of

their potential clients. In this chapter, information from Experian's Australian-based business, Pacific Micromarketing, has been obtained via the Lend Lease Group research license for Australia. Additional Mosaic Global information for use in the following chapters has been sourced directly from Experian's Mosaic Global team based in Nottingham, United Kingdom.

Due to its global presence and largely consistent classification across different geographies, Mosaic is a useful tool amongst its competitors to assess the differences and similarities between the aspirations of Australians and those living in other countries. Mosaic is already widely used by a large range of enterprises globally, but this study will argue that the robust and globally aligned data within can and should be used for strategic planning purposes.

The basis of Mosaic global profiling is that while there may be minor local differences related to cultural variations, the world's cities share common residential patterns. Figure 4.1 below indicates the way in which the Mosaic Global groupings relate to each other and to their geographical (urban versus rural) and economic contexts (low versus high affluence).

**Figure 4.1 – Mosaic Global Groups**



Source: adapted from Mosaic Global Look Up table, courtesy of Experian UK, 2011

Mosaic information at a country level is split into between eleven and twenty different Groups signified by letters (A, B, C etc). Groups are then split into between two and six sub-groups, known in Mosaic as Types (A01, B06, C11 etc). This distinction is important as references will be made to both Groups and Types in the analyses in this paper.

### How is Mosaic used?

For the purposes of this study, Mosaic is used to identify the control group in Sydney. That is, the households who represent the largest percentage of uptake of detached housing in Greenfield areas on the urban fringe. The findings will then be used to determine the percentage of the population that fall into this category. By overlaying the various layers of information available in Mosaic, it is possible to

identify a finite list of Mosaic Types that represent the households who are the biggest proponents of the Great Australian Dream.

The Mosaic Australia Groups and Types and the percentages of each in Sydney and Australia are shown in Table 4.1. In Mosaic Australia, there are eleven Groups and forty seven Types.

**Table 4.1 – Mosaic Groups and Types by percentage for Sydney and Australia**

Groups	Types	Label	Tagline	% Household Sydney	% Household Australia
<b>A</b>		<b>Privileged Prosperity</b>	<b>The most affluent families in the most desirable locations</b>	<b>18.5%</b>	<b>8.3%</b>
	A01	Portfolio Management	High-spending, established families in the wealthiest suburbs	3.5%	0.9%
	A02	Studied Wealth	Well educated, maturing families in prime suburbs	2.4%	1.7%
	A03	Cultural Riches	Successful mid-suburban families in strong migrant communities	3.6%	1.3%
	A04	Executive Residents	High-consuming maturing families in comfortable outer suburban homes	2.6%	1.9%
	A05	Family Success	Well-off family households in desirable outer suburban locations	6.4%	2.5%
<b>B</b>		<b>Academic Achievers</b>	<b>Wealthy areas of educated professional households</b>	<b>5.5%</b>	<b>6.2%</b>
	B06	Informed Affluence	High income families and singles in the attractive middle suburbs	2.3%	2.3%
	B07	Conscious Consumers	Comfortable one and two-person households in sought after suburbs	2.4%	2.0%
	B08	Professional Knowledge	Young families with high disposable incomes in quieter suburban neighbourhoods	0.8%	1.9%
<b>C</b>		<b>Young Ambition</b>	<b>Educated and high-earning young singles and sharers in the inner suburbs</b>	<b>12.3%</b>	<b>5.9%</b>
	C09	Bright Futures	Thriving students or professionals renting flats and terraces	3.2%	2.0%
	C10	Graduating Upwards	Young high-earning socialites in high-rise apartments, often close to water	5.0%	5.0%
	C11	Rising Wealth	Educated and affluent young professional couples in inner city areas	4.2%	4.2%
<b>D</b>		<b>Pushing the Boundaries</b>	<b>Young families living in recent developments on the fringes of major cities</b>	<b>8.0%</b>	<b>5.7%</b>
	D12	Hard Hats, Steel Caps	High income younger households in mining communities	0.0%	0.6%
	D13	Cul-de-Sac Kids	Mortgaged families living in the better-value outer metro fringes	2.4%	2.2%
	D14	New Lives, New Landscapes	Young families living in recently developed outer suburbs of larger cities	0.9%	1.6%
	D15	Mortgaged Aspirations	Culturally diverse young families living in high-density suburban communities	4.6%	1.3%
<b>E</b>		<b>Family Challenge</b>	<b>Mixed family forms with stretched budgets in the outer suburbs</b>	<b>9.1%</b>	<b>13.8%</b>
	E16	Families in Formation	Couples and families with young children living in recent outer suburban locations	1.2%	2.7%
	E17	Home Entertainment	Blue-collar families living in older pockets of the outer suburbs	3.9%	4.2%
	E18	Domestic Divides	Single parents and varied family structures in outer suburban communities	2.2%	3.0%
	E19	Conforming Kinship	Cash-strapped late middle aged traditionalists in outer metro areas	1.8%	3.9%
<b>F</b>		<b>Metro Multiculture</b>	<b>Medium to high density areas with much cultural diversity</b>	<b>24.0%</b>	<b>10.8%</b>
	F20	Intercontinental Connections	Established Eurasian migrants in mid to outer suburban areas	6.1%	3.1%
	F21	New Wave	Mixed generations of immigrants living in changing inner metro areas	4.0%	1.9%
	F22	Devoted Diversity	Mature and religious close-knit families in newer metro fringe developments	3.0%	1.5%
	F23	Mediterranean Style	Established low income migrant home owners around suburban retail centres	0.4%	1.6%
	F24	Bilingual Backgrounds	Mixed age multicultural areas of mainly blue-collar employment	7.7%	1.7%
	F25	Eclectic Origins	Culturally diverse extended families with high unemployment in the inner city	2.7%	1.0%
<b>G</b>		<b>Learners and Earners</b>	<b>Students and professionals living in high density, lower cost suburbs</b>	<b>9.7%</b>	<b>3.8%</b>
	G26	Social Networkers	Students and early careerists building their futures and enjoying city life	1.3%	2.5%
	G27	Strengthening Skills	White and blue-collar residents often in culturally diverse, high-density	7.0%	0.6%
	G28	Asian Studies	Campus and CBD-dwelling students, often from Asia, with low incomes	1.4%	0.7%
<b>H</b>		<b>Provincial Optimism</b>	<b>Anglo-Australian blue-collar families in provincial settlements</b>	<b>2.0%</b>	<b>10.4%</b>
	H29	Approaching Retirement	Emptying nests, reducing debt and preparing for retirement	1.3%	3.1%
	H30	Blue-Collar Regeneration	Older tradies and labourers in changing low-priced regional areas	0.1%	3.6%
	H31	Reforming Relationships	Challenged households in provincial towns and popular holiday spots	0.6%	2.8%
	H32	Traditional Owners	Indigenous Australian communities and affiliated service workers in remote	0.0%	0.9%
<b>I</b>		<b>Farming Stock</b>	<b>Rural landowners and workers in agricultural heartlands</b>	<b>1.5%</b>	<b>9.8%</b>
	I33	Rural Lifestyles	High value farms and smallholdings surrounding major urban centres	1.4%	4.2%
	I34	Off the Beaten Track	Older farming couples in hilly areas and coastal plains, often in tourist regions	0.0%	1.7%
	I35	Country Pride	Established farms and traditional families on prime agricultural land	0.1%	2.4%
	I36	Outback Isolates	Families farming the most extensive and remote parts of Australia	0.0%	0.9%
	I37	Living off the Land	Low income, low-consuming families on large farms remote from services	0.0%	0.6%
<b>J</b>		<b>Suburban Subsistence</b>	<b>Low income, low-spending households in major regional and outer metro</b>	<b>5.7%</b>	<b>11.1%</b>
	J38	Low Equity Strain	Cash-strapped younger singles living in flats and units, often rented	2.8%	2.0%
	J39	Cut-Price Living	Low-earning students and professionals in higher density locations	0.4%	2.9%
	J40	Bargain Basement	Low income elderlies in provincial towns and the outer suburbs	0.8%	2.3%
	J41	Making Ends Meet	Older home owners in aged care communities in regional and outer metro areas	0.9%	1.9%
	J42	Blue-Grey Blend	Coastal and provincial retirement communities with some younger bargain hunters	0.9%	2.0%
<b>K</b>		<b>Community Disconnect</b>	<b>Older blue-collar workers and retirees in country and coastal locations</b>	<b>3.7%</b>	<b>13.0%</b>
	K43	Same Old, Same Old	Low income, non-metro homes, accommodating older singles and couples	0.9%	4.2%
	K44	Fractured Families	Disadvantaged singles living in inexpensive accommodation	1.8%	1.8%
	K45	Country Town Elders	Small country towns with older singles and couples on very low incomes	0.0%	2.7%
	K46	Beachside Benefit	Low income older married couples mainly in coastal areas	0.2%	2.6%
	K47	Good Innings	Highly localised pockets of elderly retirees in supported accommodation	0.9%	1.7%

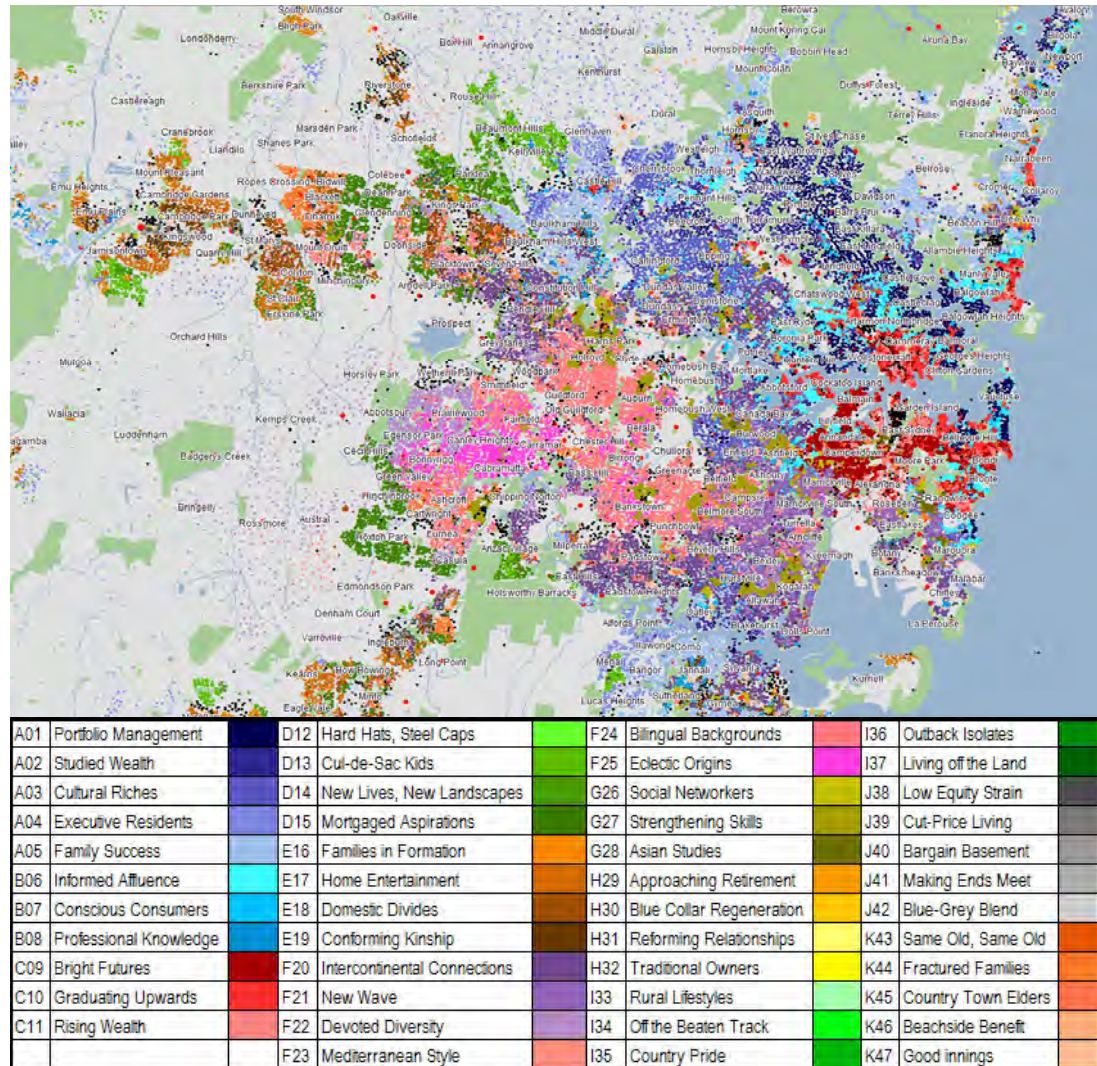
Source: adapted from Pacific Micromarketing – Mosaic profile Groups and Types 2011, courtesy of Lend Lease research license

## Sydney's Mosaic Profile

Mosaic profiling is particularly powerful as the data is geographically accurately mapped. Figure 4.2 shows the colour coded map of Sydney in 2011. The associated colour banded legend shows the

corresponding forty seven Types. From here it is possible to identify the residential patterns in the city. Each coloured dot represents an individual household, and the colour itself denotes the Mosaic Type to which the household belongs. It indicates the clustering of demographics across the city from the harbour and seaside suburbs to the outer urban ring.

Figure 4.2 – Sydney Basin Mosaic Map and Legend



Source: Pacific Micromarketing – Mosaic profile map 2011, courtesy of Lend Lease research license

## Identifying the control group - Methodology

In order to identify who the control group is in Sydney by Mosaic Type, the following Mosaic outputs are viewed in conjunction:

- The ranking of Mosaic Types most likely to live in detached housing, (shown in Table 4.2 below)
- The scaled Mosaic map of Sydney, (shown in Figure 4.3), overlaid with the areas with the highest levels of detached housing development in Greenfield areas in the last 10 years.
- The percentage representation of each Type in Sydney (derived from Table 4.1 above)

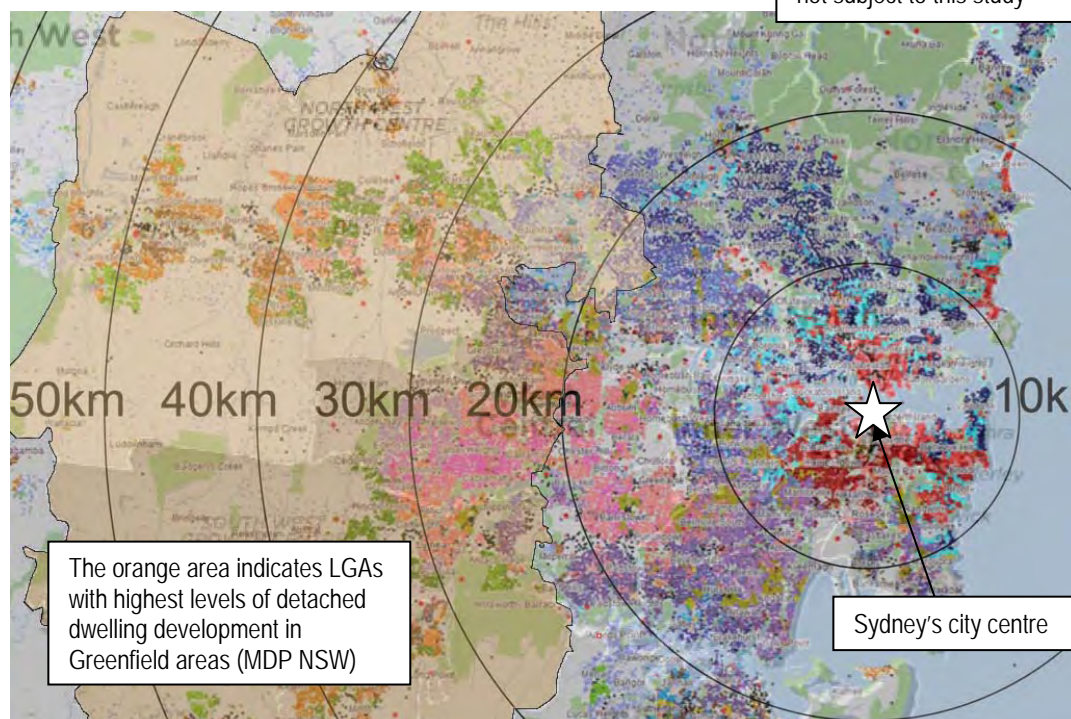
Table 4.2 –Mosaic Types most likely to live in detached housing

Rank	Type	Description	% Syd	Rank	Type	Description	% Syd	Rank	Type	Description	% Syd
1	A04	Executive Residents	2.6	9	D14	New Lives, New Landscapes	0.9	17	<del>I35</del>	<del>Country Pride</del>	<del>0.1</del>
2	D13	Cul-de-Sac Kids	2.4	10	E18	Domestic Divides	2.2	18	A02	Studied Wealth	2.4
3	E17	Home Entertainment	3.9	11	A03	Cultural Riches	3.6	19	<del>H29</del>	<del>Approaching Retirement</del>	<del>1.3</del>
4	A05	Family Success	6.4	12	E19	Conforming Kinship	1.8	20	F23	Mediterranean Style	0.4
5	F22	Devoted Diversity	3	13	<del>H38</del>	<del>Blue Collar Regeneration</del>	<del>0.1</del>	21	<del>K45</del>	<del>Country Town Elders</del>	<del>0</del>
6	<del>I35</del>	<del>Rural Lifestyles</del>	<del>1.4</del>	14	A01	Portfolio Management	3.5	22	<del>K43</del>	<del>Same Old, Same Old</del>	<del>0.9</del>
7	E16	Families in Formation	1.2	15	B08	Professional Knowledge	0.8	23	F24	Bilingual Backgrounds	7.7
8	D15	Mortgaged Aspirations	4.6	16	F20	Intercontinental Connections	6.1	24	<del>I37</del>	<del>Living Off the Land</del>	<del>0</del>

Source: adapted from Pacific Micromarketing, Mosaic Australia Profiles 2008 – Living Space>Housing Type> Separate Housing

Red strike-throughs indicate rural and country town types not subject to this study

Figure 4.3 – Mosaic Types by distance from the city centre



Source: adapted from Google Maps, 2011 and Pacific Micromarketing Mosaic 2011, courtesy of the Lend Lease research license

When Figures 4.2 and 4.3 are viewed in conjunction, it can be surmised that the Types that are in the first half of the Mosaic rankings of Types most likely to live in detached housing and who also live

further than 20km from the city centre are therefore the types that can be classified as the control group. Table 4.3 contains the final list making up the control group by Mosaic Type.

**Table 4.3 – Sydney's control group by Mosaic Type**

Rank	Type	Label	Description	% Syd	% Aus
1	A04	Executive Residents	High consuming maturing families in comfortable outer suburban locations	2.6	2.5
2	D13	Cul-de-Sac Kids	Mortgaged families living in the better value outer metro fringe areas	2.4	2.2
3	E17	Home Entertainment	Blue collar families living in the older pockets of the outer suburbs	3.9	4.2
4	A05	Family Success	Well off family households in desirable outer suburban locations	6.4	2.5
5	F22	Devoted Diversity	Mature and religious close-knit families in newer metro fringe developments	3	1.5
7	E16	Families in Formation	Couples and families with young children living in recent outer suburban locations	1.2	2.7
8	D15	Mortgaged Aspirations	Culturally diverse young families living in high density suburban communities	4.6	1.3
9	D14	New Lives, New Landscapes	Young families living in recently developed outer suburbs of larger cities	0.9	1.6
10	E18	Domestic Divides	Single parent and varied family structures in outer suburban communities	2.2	3
12	E19	Conforming Kinship	Cash-strapped late middle aged traditionalists in outer metro areas	1.8	3.9
16	F20	Intercontinental Connections	Established Eurasian migrants in mid to outer suburban locations	6.1	3.1
20	F23	Mediterranean Style	Established low income migrant home owners around suburban retail centres	0.4	1.6
23	F24	Bilingual Backgrounds	Mixed age multi cultural areas of mainly blue collar employment	7.7	1.7

Source: adapted from data derived from Google Maps, 2011 and Pacific Micromarketing Mosaic 2011, courtesy of the Lend Lease research license

Based on this data, the Sydney control group forms a total of 43.2% of the population of Sydney – a significant proportion. In the global assessments later in the paper we assess the Types identified above to see how they live in other cities around the world.

**Table 4.4 – Mosaic Global Look Up Table (Sydney's control group Types highlighted)**

	A	B	C	D	E	F	G	H	I	J
	Sophisticated Singles	Bourgeois Prosperity	Career and Family	Comfortable Retirement	Routine Service Workers	Hard Working Blue Collar	Metropolitan Strugglers	Low Income Elders	Post Industrial Survivors	Rural Inheritance
Australia:	B07, C09, C10, C11	A01, A02, A03, A04, A05, B06	B08, D12, D13, D14, F20	H29, H30	E17, F21, G26, H32, J39	E19, F24, H31	E18, F25, G27, G28, J38, K44	J40, J41, J42, K45, K46, K47	D15, E16, F22, F23, K43	I33, I34, I35, I36, I37
Denmark:	D11, D12, D13, D14	A01, A02, A03, B04	B05, B06, B07, C08, C09, C10	G23, H26, H27, H28, J33	E15, E16	F21, I30, I31, K35	E17, F18, F19, F20	F22, G24, G25	I29	J32, J34, K36, K37
UK: (67 types)	A01, O62, O63, O64, O66, O67, G29, H34	A02, A03, A04, B07, B10	B05, B08, B09, F24, F27, G31, G32, F28, G33, O61, G30	B06, D19, E20, E22, E23	F25, D16, H37, F26, H35, H36	D18, D17, I39, M56	I41, J43, J44, K45, K46, K47, K48, K49, K50	E21, J42, L50, L51, L52, L53, M54	M55, I38, I40, N57, N58, N59	C12, C11, C13, C14, C15
USA:	G24, G25, K37	A01, A02, A05, A06, C11, C13, C14, E19, E21	A03, A04, B07, B08, B09, B10, D15, D17, F22, F23	C12, Q62	K39, O50, O55		O, O52, O53, O54, P57, P58, P59, P60, P61, R66, R67, S69, S70	L41, Q63, Q65, S71	J35, L42, N48, S68	L43, M44, N46, N49

The small red outlines indicate the types identified as Sydney's control group

Large red boxes indicate Sydney's control group by Global Group

Source: adapted from Mosaic Global Look Up table, courtesy of Experian UK, 2011

This finite list of groups and Types is then used in the Mosaic Global assessment of housing types and lifestyles in the cities subject to this study around the world. In the second half of the paper, the findings of the Sydney condition will be used to compare against the conditions of four global cities. The Mosaic Global function has aligned all of the Mosaic Types at a country level into a single table. Table 4.4 represents the abbreviated version of the complete table for the countries subject to this study.

The table has identified the Types (indicated in small red boxes) from Table 4.3, and highlighted (in the large red boxes) the way they correlate with the Types in Denmark, the United Kingdom and the United States.

## Chapter 5 – London

London is equal first in the Global Cities Index along with New York City. In the four key areas, London ranks consistently highly in the areas of cultural, infrastructural, political and economic characteristics and is governed by a single entity in the Greater London Authority headed by the Mayor of London. The case study for the city of London focuses on the area known as Greater London. The current metropolitan planning instrument for London, The London Plan, has many objectives but this chapter will focus specifically on containment and housing.

### Containment Objectives

Maintaining the city's boundaries, green belt and open spaces have been a prominent feature of the metropolitan plan for London since 1935. The Metropolitan Green Belt, as it became known, subsequently became the basis of the Green Belt (London and Home Counties) Act 1938. (Bowie, 2010) While the green belts in each region are defined by local authorities, the Government sets out its policies and principles towards the green belts in Planning Policy Guidance Note 2: Green Belts (PPG2). The PPG2 notes that "the purposes of Green Belt policy and the related development control policies set out in 1955 remain valid today with remarkably little alteration." (Department for Communities and Local Government, 1995, p5) The five purposes outlined by PPG2 of greenbelts are:

- "To check the unrestricted sprawl of large built-up areas
- To prevent neighbouring towns from merging into one another
- To assist in safeguarding the countryside from encroachment
- To preserve the setting and special character of historic towns
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land" (Department for Communities and Local Government, 1995, p5)

Indeed, when a comparison is drawn with the Sydney, Detroit or Dublin condition, the greenbelt is one of the defining successes of the London Plan, both current and previous iterations. Access to the natural environment still plays a prominent role in the strategic development of London, with "Areas of deficiency for access to nature" (GLA, 2010) clearly defined in the current London Plan.

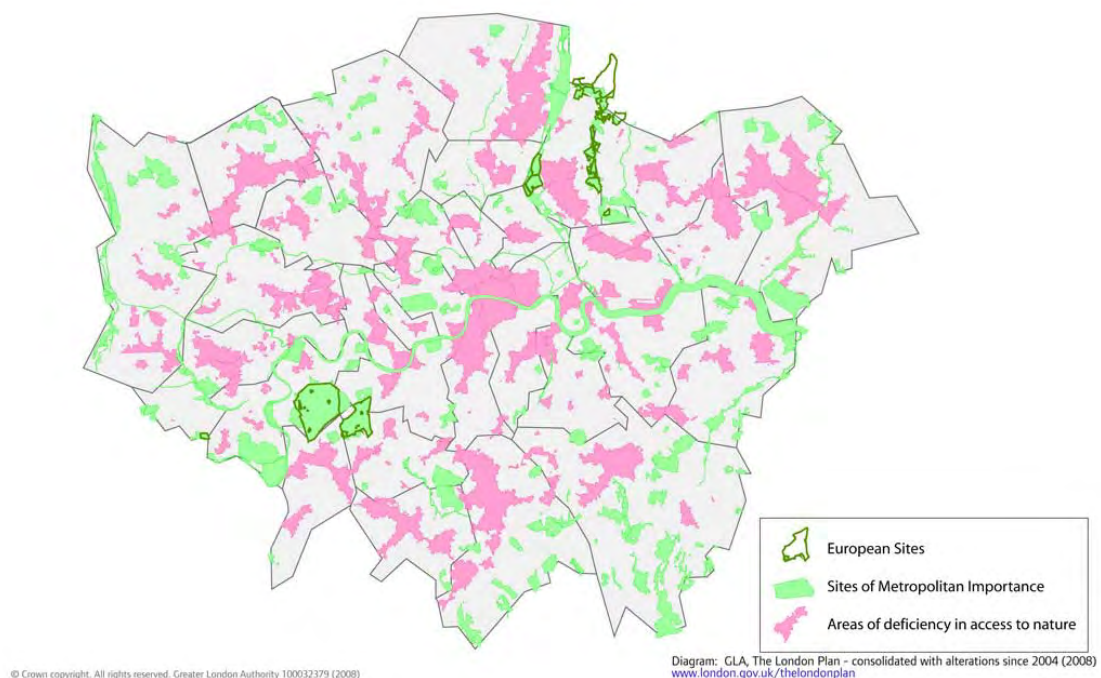
Drawing lessons from the Metropolitan Green Belt strategy of the United Kingdom could also have positive implications for solving some of Sydney's density issues as they relate to transport infrastructure. David Higgins, Managing Director of Network Rail in the United Kingdom, indicated that while the delivery of heavy rail transport infrastructure may be difficult for cities with low density urban fringes such as Sydney, alternative models may be examined which connect existing urban centres and workforces. Successful examples of this model have been carried out in Europe – such as the

construction of the Oresund Bridge, connecting Copenhagen and Malmo, and a new plan underway to put in place high speed rail between Birmingham and London.

This responds directly to the NSW Government proposed reforms in A New Planning System for NSW Green Paper (2012) across the areas of both Strategic Planning and Infrastructure Provision. While the Green Paper is non-specific in its methodology and proposed mechanisms, it outlines “aligning infrastructure budget to support strategic growth priorities” (2012, p. 26) under Growth Infrastructure Plans and as part of the Subregional Delivery Plans.

David Higgins also suggests that infrastructure could be used as a catalyst for growth rather than simply responding to a primary need for transportation. If implemented with a high strategic focus, as was the case with the Oresund Bridge, its benefits need not be directly aligned with a primary profit turnover, but rather as a catalyst for the revitalisation of areas in need of employment, growth and connectivity. While it has been instrumental in revitalising Malmo and providing a much needed labour force to Copenhagen, the Orseund Bridge will in fact not turn over a primary profit until the year 2035.

**Figure 5.1 – Greenbelt Strategy and areas of deficiency in access to nature in London**



Source: GLA, The London Plan, 2008, [www.london.gov.uk/thelondonplan](http://www.london.gov.uk/thelondonplan)

### **London's Mosaic Profile**

As the Mosaic data for the United Kingdom is more detailed and the population in general more diverse, according to the Mosaic Global look-up table, there is a greater range of Types in London that correspond with Sydney's control group. The methodology table showing the rationale behind the selection of Types has been included in Appendix A. They are as follows:

Table 5.1 – Mosaic UK Types of Sydney's control group in London

Type	Label	Description	% London	% UK
B05	Mid Career Climbers	Families enjoying the fruits of career success in pleasant detached houses	0.26	2.3
B07	Distinctive Success	Successful business people, often self made, living in large detached houses in semi-rural locations	0.05	0.48
B08	Dormitory Villages	Comfortably off families in spacious homes in pleasant settings but within easy reach of jobs	0.05	1.29
B09	Escape to the Country	Families choosing to give their children a country lifestyle while commuting to urban jobs or running businesses from home	0.03	1.31
D17	Jacks of All Trades	Blue collar workers and traders, serving the needs of small market towns	0.01	1.99
D18	Hard-working Families	Married couples approaching retirement age, in not especially fashionable small town locations	0.14	2.63
F24	Garden Suburbia	Mid-life families with above average incomes living in the nicer middle ring suburbs of larger cities	2.20	2.14
F25	Production Managers	Middle income married couples, owning unpretentious, semi-detached housing	0.03	2.63
F26	Mid-Market Families	Families with many grown-up children still living at home, living in cheaper suburban semis	0.12	2.7
F27	Shop Floor Affluence	Employees earning reasonable incomes, living with their families in relatively inexpensive semis in industrial towns and cities	0.32	2.73
F28	Asian Attainment	Comfortable middle aged families with school aged and older children, predominantly from an asian background	2.48	0.98
G30	Soccer Dads and Mums	Parents of school age children, owning large recently built detached houses with mortgages funded by their successful careers	0.06	1.34
G31	Domestic Comfort	Families with high incomes derived from managerial positions and considerable property wealth in their suburban detached houses	0.04	1.09
G32	Childcare Years	Young, well educated and well paid couples, either married or cohabiting, most of whom are starting families	0.13	1.52
H37	First to Move In	People living in the most recently built, brand new housing	0.17	0.37
I38	Settled Ex-Tenants	Older couples whose children have flown the nest working in low skilled occupations and living in ex-council housing	0.06	2.06
I39	Choice Right to Buy	Middle aged couples, some with older children still at home, living in the more desirable ex-council areas	0.19	1.72
I40	Legacy of Labour	Older families on low incomes living on council estates in areas where industry was once prevalent	0.01	2.68
I41	Stressed Borrowers	Middle aged people renting or owning in council areas, many of whom are over-stretched with debt 2.20	0.70	2.2
J43	Streetwise Kids	Large young families with many single parents, often unemployed and claiming benefits, living on deprived council estates	0.32	1.05
J44	New Parents in Need	Young parents, often single, bringing up young children in barely adequate council terraces facing considerable disadvantage	0.00	1.8
M55	Backyard Regeneration	Singles and families in affordable but respectable terraces which for the young are a stepping stone to better things	0.15	2.06
M56	Small Wage Owners	Owners living in inexpensive private terraces in a range of relatively low paid occupations	0.55	3.09
N57	Back to Back Basics	Young sharers and couples with young children, starting out in low price, older terraces	0.05	1.97
N58	Asian Identities	Traditional South Asian families owning relatively small terraces for their many family members	0.16	0.88
TOTAL			8.28	45.01

Source: adapted from Mosaic UK Interactive Guide, Experian, 2011

However, the low percentages corresponding to each Type and the low total percentage for these Types in London would indicate that while there may be a significant percentage of Britons who are corresponding Types to Sydney's control group, only a small percentage actually live in London. As indicated by the descriptions, many of these Types have deliberately chosen semi-rural lifestyles, outside the confines of the city. Others live in public housing, a tenure which accounts for far greater numbers in the UK where it has a much stronger and more robust history, than in Australia. Spatially, development areas in London are limited, and the current London Plan notes the housing shortage and consequent lack of affordability of housing in London to be the most urgent of issues. (GLA, 2011)

The table below indicates the direct relationship between the control group in Sydney and London, and the likelihood of these Types to live in detached housing in each city.

Table 5.2 – Comparison of Sydney's control group and London's control group equivalents

	% control group	% of control group living in detached housing	% population in control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>London</b>	8.28%	0.00%	0.00%

Source: adapted from Mosaic UK Interactive Guide, Experian, 2011

There is very little detached housing available in London and what little there is, is well out of the reach of the Types subject to this study. For this reason, the Types to whom detached housing is an important lifestyle factor will forego living in London itself in favour of smaller towns in London's exurbs.

## Chapter 6 – New York

*"Underlying all of our efforts is a focus on the human and the neighborhood scale of the city."*

Amanda Burden  
City Planning Commissioner  
NYC Strategic Plan, 2011

New York City is naturally contained by its peninsular topography and has a population of over 8 million people covering an area of just 790 square kilometres. (NYC Dept of City Planning, 2011) As a globally influential centre of politics and culture, New York's macro aspirations for its future are focussed on further improvement of amenity and transport for its residents, while reducing its carbon footprint.

While the current form of New York City is in general adherence to many New Urbanist principles, the planning of the city preceded the movement, and therefore did not set out to create a New Urbanist landscape, but rather, the New Urbanism movement drew many of its lessons from the land use strategies of New York City.

The planning ordinances in New York City's history have led to New Yorkers' daily means of travel centring on means other than travel by private car, and as a result, using 2/3 less carbon than the average United States resident. (NYC Dept of City Planning, 2011) The current plan for New York City is focussed on achieving decentralisation and investment in new economic hubs in some of the city's most neglected areas.

In general, development is actively channelled towards transit rich areas. Where development of significant areas of residential dwellings takes place in the outer boroughs, it does so in conjunction with the development of comparatively sized commercial space to maximise on the decentralisation objectives of the metropolitan area (NYC Dept of City Planning, 2011) and to ensure that new housing does not cause excessive additional loads on existing infrastructure.

### **New York's Macro Aspirations**

New York City already enjoys one of the most efficient transport networks in the world. An assessment of the city's strategic aims indicates a strong inclination towards the further improvement of transport around the city. One of these aims is that by 2030, 95% of all new development must be within a ten minute walk of a subway stop. Currently this figure is already at 87%. (NYC Dept of City Planning, 2011)

## Copenhagenising NYC

In 2009, Jan Gehl, one of the most influential figures in the contemporary documentation of the design of the city of Copenhagen was engaged by the Department of Transport of New York City to make similar adjustments to the streets and public spaces of New York. With the introduction of a vast network of bike lanes across New York's five boroughs and the incremental addition to public open spaces by removing lanes of traffic, New York has seen a significant increase in the use of bicycles in the city as a primary means of transport. By reducing lanes of traffic, pedestrian spaces and streets have become safer.

It is evident that while the densities of New York City are higher than any other city in this study, it has certainly had a positive impact on the provision of infrastructure to the city. Higher densities mean lower costs per capita for infrastructure, a greater tax and income base for reinvestment in the city and with which to improve amenity. The high population densities have also ensured the viability of the transport system, as pointed out in *Green Metropolis* (2009), that "the most significant factor in determining the viability of any transit system – far more significant than fare levels or demographics or willpower or anything else – is population density" (Owen, 2009, p.119)

## Urban Renewal

Perhaps the most significant of the planning mechanisms implemented by the New York City Department of Planning is its zoning mechanisms, underlined by PlaNYC, Mayor Michael Bloomberg's 2007 initiative to prepare the city for one million more residents by 2030. Over 97% of the 127 initiatives were implemented within 12 months of the plans launch and subsequently expanded to include 5 more initiatives with 400 specific milestones set for completion by 31st of December, 2013.

The underlying key to the success of the zoning plans contained within PlaNYC is its approach to planning and zoning as fluid mechanisms with which to achieve overall city objectives rather than catch-all long term mechanisms that aim to solve all future planning conundrums.

Alexandros Washburn, Chief Urban Designer for the New York City Department of Planning, notes that "as long as they work, planning mechanisms don't have to be simple". He drew on the example of the High Line, a recently redeveloped park in Chelsea, south of Manhattan that previously existed as an elevated industrial railroad. The High Line is now a celebrated urban park which has been the centrepiece of the revitalisation of the Special West Chelsea District, a rezoning of former meatpacking and industrial warehouses into high end residential and commercial spaces. This was mainly achieved through the use of transferable development rights (TDRs), whereby the owners of the land under the railway, who were prevented from building up by the presence of the railway, could transfer their development rights to adjoining properties, thereby being compensated for the land that they were not

allowed to develop. The new owners of these development rights could add to their existing building by building up to a certain extended allowable limit, which could be further extended if they proposed to develop a certain minimum percentage of affordable housing.

Figure 6.1 – The New York City High Line development



Source: Iwan Baan, Design Boom, 2011

Washburn notes that this was just one example of how complex planning mechanisms can facilitate simple objectives. One such objective underpinning any development initiative is that the solution must resolve at least two problems. In the case of the High Line, the TDRs answered several. They allowed the reuse of a disused icon of the city into much needed usable open space in an area of the city traditionally deficient in its access to open space; it allowed the owners of the land below the High Line, who had been campaigning for its (expensive and disruptive) removal to be compensated for the land they could not develop and finally, it facilitated the wider city objective of the development of more office and residential space, particularly affordable residential by incentivising the new owners of the development rights to provide them.

The High Line was also notable in the way it encompassed public engagement and community participation. The instigating factor in the redevelopment of the High Line was the activities of a resident and city activist group known as Friends of the High Line, who initially campaigned and subsequently worked with the New York City Government in facilitating the redevelopment of the High Line.

It is a best practice example of all four of the planning objectives noted in the NSW Green Paper, with exemplary community participation, provision of infrastructure, strategic focus and streamlined approval.

## New York's Mosaic Profile

The equivalent Types to Sydney's control group make up well over half of the overall population of the city. However, detached living in New York City is almost unheard of, even in the minor boroughs. The following figures are drawn from both US Census information and an in depth Mosaic analysis by zipcode for each of the five boroughs of New York City. The tabulated detail of this analysis can be found in Appendix B.

**Table 6.1 - Mosaic USA Types of Sydney's control group in New York City**

Type	Label	Description	% NYC	%USA
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	20.67	0.62
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	19.11	0.73
A06	Jet Set Urbanites	Mix of affluent singles and couples living high rise, fashionable lives in urban neighbourhoods	10.08	0.48
H26	Progressive Potpourri	Mature, multi ethnic couples with comfortable and active lives in middle class suburbs	2.21	1.00
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	1.91	1.45
P61	Humble beginnings	Multi-ethnic singles and single-parent households with mid-scale incomes in city apartments	1.76	0.99
B10	Asian Achievers	Affluent, mainly Asian couples and families enjoying dynamic lifestyles in metro areas	1.35	0.56
D16	Settled in Suburbia	Upper middle class diverse family units and empty nesters living in established suburbs	1.09	0.77
I32	Latin Flair	Conventional Hispanic Gen X families located in selected coastal city homes	0.31	0.98
P60	Cuidad Strivers	Mid-scale Hispanic families and single parents in gateway communities	0.13	1.12
B08	Babies and Bliss	Middle-aged couples with large families and active lives in affluent suburbia	0.01	1.65
TOTAL			58.64	10.35

Source: adapted from Experian Mosaic USA Interactive Guide, 2011

It is clear from the data that while New York is seen to be one of the most diverse metropolises in the world, the city is actually made up of quite a small number of very specific types of people. There is an inherent diversity within this group, but the levels of place stratification and economic segregation in the city are also quite high. As with London, this is driven by the high levels of extreme wealth that can be

found in the city – a function of its economic base, and the ability to attract wealth and opportunities globally.

Table 6.2 indicates the direct relationship between the control group in Sydney and New York, and the likelihood of these types to live in detached housing in each city.

**Table 6.2 – Comparison of Sydney’s control group and New York’s control group equivalents**

	% control group	% of control group living in detached housing	% population control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>New York City</b>	58.64%	0.00%	0.00%

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Unlike London, there is a representation of Types who are suburban in nature, but who choose to live in the denser surrounds of New York City. In London, the same types tended to choose not to live in London at all.

As with London, the lack of available detached housing sees negligible numbers of New Yorkers who fit the control group equivalent profile actually living in detached housing in the confines of the city. Unsurprisingly, the housing types of all of New York’s five boroughs are at a higher density than elsewhere in the country with a distinct under-representation of detached dwellings anywhere in New York City.

## Chapter 7 – Copenhagen

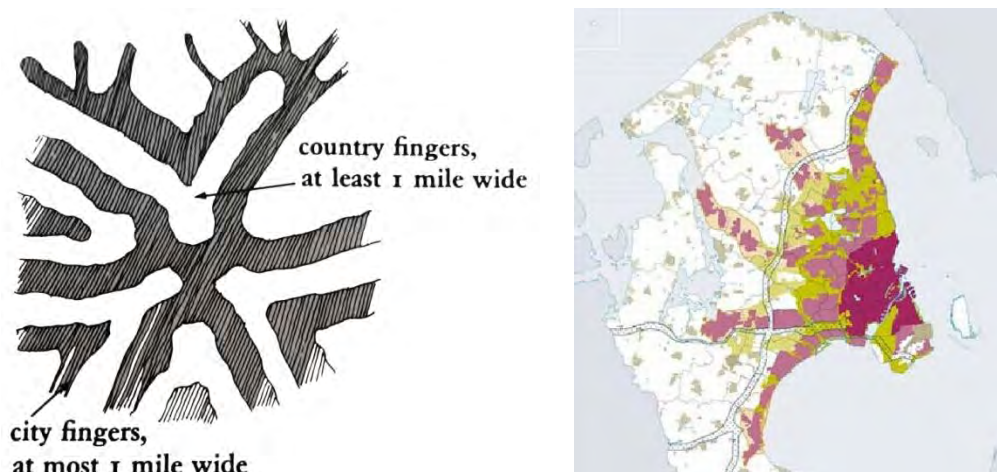
The Danish capital is currently home to over 1.9 million inhabitants as at 2011 (Statistics Denmark, 2011) and is a working harbour city, situated along the north-eastern coastline of the island of Zealand. The first regional plan for the Copenhagen area was initiated in 1947, primarily to combat the uncontrolled urban growth arising from industrialisation. Called the "Finger Plan", it divided the Copenhagen suburbs into five 'fingers' which were built around the S-train railway lines. This model is relatively common in Scandinavia and certain other parts of Europe, with cities such as Stockholm and Helsinki utilising the same method of 'fingers' of development concentrated around railway lines to preserve parts of the natural landscape and to limit the spread of sprawl.

The Alexander et al tome, *A Pattern Language* (1977), identifies this method of planning as the third of the regional planning patterns that "can never be designed or built in one fell swoop – but patient piecemeal growth" (p xix) – called City Country Fingers.

If we wish to re-establish and maintain the proper connections between city and country, and yet maintain the density of urban interactions, it will be necessary to stretch out the urbanized area into long sinuous fingers which extend into the farmland... Not only will the city be in the form of long narrow fingers, so will the farmlands adjacent to it. (Alexander et al, 1977, p24)

Figure 7.1 shows the Copenhagen plan against the Alexander pattern of City Country Fingers.

Figure 7.1 – City Country Fingers and the Copenhagen Finger Plan



Source: (left) Alexander et al, 1971, *A Pattern Language – Towns, Buildings, Construction*, Oxford University Press, New York, p.25, (right) Matthiesson, C.W., 2007, *Infrastructure Factsheet*, Ministry of Foreign Affairs Denmark, <http://www.netpublikationer.dk/um/8583/html/chapter01.htm>

Overall, the finger plan worked well in guiding urban development, and is widely saluted for its foresight. According to Pedroli et al (2007), however, the plan was not without its flaws. The finger plan model was not suited to the pattern of development in the north but was appropriated anyway, and contained some "indefensible ideas (such as the establishment of 15 airports to provide local, airborne commuter services)" (Pedroli et al, 2007, p324). However, the plan has left an overall positive legacy on the city. Copenhagen is regularly near the top of world liveability indexes and eco-rankings. Indeed the city is aiming to be carbon neutral by the year 2025, without reliance on offsets, mainly by investing in green energy to boost local growth (Quest, R, 2011).

**Figure 7.2 – Bike lanes in the northern fringe suburbs of Copenhagen**



Source: Laila Mehrpour

Additionally, a positive historical association with the bicycle continues today. Over the years, bicycles have become a part of Copenhagen's urban identity. City planning has facilitated this shift with some of the most bike-friendly town planning initiatives in the world. Copenhagen planning policy notes that at present 36% of Copenhagen's population travels to work, school or university by bicycle, and the planning policy is actively targeting the expansion of this figure to 40% by 2013 and 50% by 2015. The

bike lanes are constantly being expanded and widened to support the ever growing number of cyclists, and much of the network even has its own signal system.

A key signifier of the success of the Copenhagen planning system is the level of public engagement with the development and planning of the city. The team at Gehl Architects has been involved with the Copenhagenisation strategies implemented in New York and Melbourne, says that when it comes to the use of their city, Copenhagenites are engaged and willing to be involved. She went on to cite the example of the Orestaden development in Amager, the southern part of Copenhagen, which involved little community participation. A new apartment complex located just 15 minutes from the city centre well serviced by rail and bike paths, it promised much future growth for investors and much needed housing for the city. And yet it achieved lacklustre results and minimal interest from both buyers and renters. Anne Sophie Kvist of Gehl Architects noted that, perhaps incredibly to a Sydneysider, it failed because of the poor quality of its outdoor and public spaces. When so much of life is lived in these shared communal areas, it is important that the spaces are user friendly, and no promise of future financial growth was great enough to overcome this lifestyle hurdle.

**Figure 7.3 – Recreation in Copenhagen is primarily carried out in public spaces**



Source: Laila Mehrpour

Copenhagenites also take great pains to “vote with their feet”. The city experiences one of the coldest winters in the world, but the afore-mentioned 36% of the population who cycle to work, school or university everyday as a primary means of transport only drops by 5% in Copenhagen’s harsh winters. Indeed, the city clears the snow from the cycle tracks before tackling the roads, to cater for the “stubborn” propensity of Copenhagenites to cycle whatever the weather. The residents of Copenhagen

not only believe in the initiatives deployed in the city, they make active efforts to ensure that the services provided are used and thus, continuously improved.

Furthermore, and most notably in the context of the aims of the NSW Green Paper, the residents of Copenhagen feel empowered and engaged with the outcomes provided for their city. As pointed out in the Green Paper, residents in NSW also “care deeply about new development and how it changes their neighbourhood. All members of the community must be able to have their say on the decisions that affect them.” (p.9) Copenhagen is thus a worthwhile best practice example of how communities can be both engaged and empowered through the planning process.

## Copenhagen’s Mosaic Profile

The area of Copenhagen is just 1/48th of Sydney’s but its density is at nearly seven times that of Sydney. It is a good counter study for Sydney due to a number of similar geographic and lifestyle factors. As a working harbour city and a coastal city, the geographic contexts are very similar. Likewise, as with Sydney, Copenhagen’s economic origins are mercantile in nature. Furthermore, Denmark is highly urbanised reflecting the metropolitan primacy observed in Sydney, with approximately 85% of the population residing in cities. 34% of the total population resides in Copenhagen.

**Table 7.1 – Mosaic Denmark Types of Sydney’s control group in Copenhagen**

Type	Label	Description	% Denmark
B04	Suburban Managers	Successful suburban families with time for everything	2.54
B05	Aspiring Younger Families	Successful young families in newer homes	1.53
B06	Mid-range Commuters	Commuting couples who live under the same roof	2.88
C08	Better-off Pragmatists	Families in series or chain houses with decent economy and fortunes	2.69
C09	Middle of the Road	Mr. and Mrs. Denmark - row on row	4.39
C10	Challenged Families	Rows of small and exposed economies	2.54
F18	Big City Flat Dwellers	Tenants in the cities from diverse backgrounds and with manageable economies	3.05
F19	Metro Melting Pot	Smaller, younger households with low income and wealth in the city swarm	2.67
F20	Multicultural Challenge	Multicultural people in rental housing in cities, small fortunes and challenges	2.70
F21	Urban Counterculture	Terraced houses in urban areas - young families with scarce resources	2.93
TOTAL			27.92

Source: adapted from unpublished Mosaic Denmark data, courtesy of Experian UK 2011

**Table 7.2 – Comparison of Sydney’s control group and Copenhagen’s control group equivalents**

	% control group	% of control group living in detached housing	% population control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>Copenhagen</b>	27.92%	22.17%	6.19%

Source: adapted from unpublished Mosaic Denmark data, courtesy of Experian UK, 2011

As shown in the table above, the equivalent Mosaic Types to Sydney’s control group form just under a third of the Danish population. As with London, a number of the Types that align with Sydney’s control group in Denmark are actually not likely to live in Copenhagen at all, but rather in semi-rural areas within easy reach of the large cities.

Table 7.3 shows the type of housing that correlates with each of the Mosaic Types indicated above. It shows that the overwhelming percentage of the B Group Types are likely to choose to live in detached housing. As the wealthier of the three identified Mosaic Groups that form the Danish equivalent of the control group, they have the financial capability to have this choice. Most importantly, it indicates that amongst the collective group, apartments are just as likely to be chosen as detached dwellings, with semi-detached housing a viable mid-range alternative.

Table 7.3 – Types of Housing for the Danish equivalents of Sydney's control group

Type of Housing	B04	B05	B06	C08	C09	10	F18	F19	F20	F21
Apartments	1.49	2.81	2.03	17.09	23.46	22.63	87.35	92.15	88.62	47.74
Cottages	0.53	0.30	0.64	0.08	0.19	0.01	0.00	0.01	0.00	0.06
Detached	87.97	80.37	74.48	47.59	35.27	15.20	7.18	3.24	3.04	17.64
Farmhouse	1.15	3.12	1.23	0.43	0.74	0.51	0.01	0.01	0.00	0.45
Other Buildings	0.17	0.28	0.18	0.17	0.34	0.15	0.11	0.04	0.09	0.22
Retirement Homes	0.13	0.16	0.17	0.58	0.75	0.26	0.57	0.60	0.51	0.43
Semi-Detached	8.46	12.80	21.22	33.58	39.09	61.06	4.66	3.85	7.54	32.98
Student Homes	0.10	0.16	0.04	0.47	0.17	0.18	0.12	0.10	0.19	0.47

Source: adapted from unpublished Mosaic Denmark data, courtesy of Experian UK 2011

The most recent publicly available dwelling data available from Statistics Denmark shows the spread of detached housing in the different regions of Denmark as shown below. Region Hovedstaden is the capital region – Copenhagen and its suburbs.

Table 7.4 – Dwelling stock by type of building – regional analysis (Denmark, 2009)

Copenhagen  
Region figures  
indicated in red box

Dwelling stock by type of building, regional analysis. 2009						
1 January	Dwellings by type of building					Dwelling stock total
	One-family houses	One-family houses (terraced or semi-detached)	Dwellings in multi-family buildings	Student hostels	Other dwellings	
	number of dwellings					
Denmark total	1 210 260	383 342	1 048 830	37 717	55 337	2 735 486
Region Hovedstaden	193 604	104 754	518 948	15 394	14 212	846 912
Region Sjælland	219 734	63 677	99 389	3 760	12 600	399 160
Region Syddanmark	319 104	96 405	160 259	7 213	10 905	593 886
Region Midtjylland	309 820	80 420	191 032	8 521	11 251	601 044
Region Nordjylland	167 998	38 086	79 202	2 829	6 369	294 484

Source: Statistics Denmark, 2010, Statistical Yearbook 2010, Income, Construction and Housing Report 2009 data, p.16

When viewed in conjunction with the Danish Types identified as Sydney's control group, the data above shows that in Copenhagen, 62% of dwellings are indeed apartments, with just under 23% of people living in detached dwellings and a further 12% living in semi-detached dwellings. It would indicate that the reasonable trade-off for living in the capital region is to accept a denser housing model, unless one has the financial capability to select a detached dwelling.

Amongst the most prevalent groups, as is clearly demonstrated by the data, there is a strong bias towards higher density dwelling models, particularly apartment style living, with the sole exception to this rule appearing to be the A Group, in the north of Copenhagen, where the detached housing

enclaves of the very wealthiest of Copenhagenites can be found. As the spread of wealth appears to be across the entire city, it would appear that a significant portion of higher income earners also live in apartments both in the inner city and in the suburbs. This is in direct contrast to the Sydney situation where apartment living in the suburbs is invariably the mainstay of low income earners.

**Figure 7.4 – Apartments in central Copenhagen**



Source: Laila Mehrpour

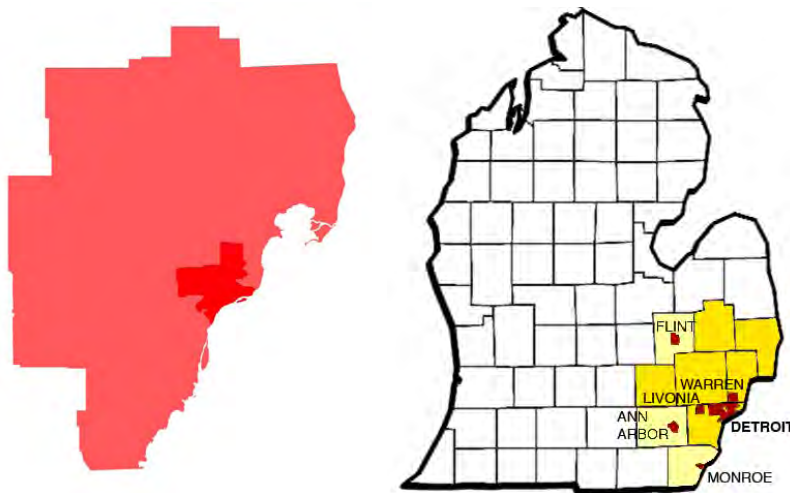
Notably, one of the general trends observed in Denmark was that just as the size of households was decreasing, the size of dwellings is increasing. This is obviously resulting in a net increase in number of dwellings. The trend toward smaller households is also noted in Australia (Kelly et al, 2011a) with an aging population.

## Chapter 8 – Detroit

One of the most prominent examples of passive, industry led planning and its possible consequences is the city of Detroit in Michigan, USA. With a peak population of nearly 5 million, Detroit was once the capital of the United States megalithic auto industry. Detroit is also a case study in the long term effects of economic and ethnic segregation on the health and wellbeing of the city.

Perhaps more so than the other cities discussed in this paper, Detroit was profoundly affected by the post war boom and subsequent democratisation of the automobile. The original footprint of the city, up to the post war period is articulated in the darker red centre of the figure below. Both maps in the figure demonstrate the physical form of Detroit as a city today with its ill-defined and sprawling edges.

**Figure 8.1 – Detroit and its environs and the Detroit-Warren-Livonia MSA<sup>2</sup> and Detroit-Warren-Flint CSA<sup>3</sup>**



Source: adapted from Google Maps, 2011 and <http://commons.wikimedia.org/wiki/File:DetroitMSA.png>

In terms of industry, the city's governance relied for many years on the auto industry alone. Daniel Okrent, writing for Time Magazine in 2009, points out:

If you wanted to get elected in southeastern Michigan, you had to support the party line dictated by the Big Four — GM, Ford, Chrysler and their co-conspirator the United Auto Workers.... Anything that might limit the industry's income was bad for the auto industry, and anything bad for the auto industry was deemed dangerous to Detroit. (Okrent, Time, 24 Sept, 2009)

---

<sup>2</sup> In the context of the US census bureau MSA refers to the Metropolitan Census area – in this case, it refers to Detroit, Warren and Livonia

<sup>3</sup> CSA refers to the Combined Statistical Area – common where cities are made up of a number of smaller adjacent and/or related Metropolitan Statistical Areas. In this case, the CSA is Detroit and its adjacent MSAs of Warren and Flint

When the auto industry of Detroit finally collapsed with the downfall of GM, it's newly unemployed, fringe dwelling middle and working classes had lost jobs and defaulted on loans and were subsequently forced to leave in droves. Over the last few years, much of Detroit has been abandoned. In 2009, unemployment in the city was at almost 30%. Once the United States 4th largest city, Detroit was, in 2009, the 11th largest and is now the 18th largest city and slipping rapidly (US Census Bureau, 2011). A 2009 parcel survey of the city found that one quarter of the residential lots in the city were either vacant or undeveloped, and a further ten per cent unoccupied (Gallagher, 2010). The yawning gaps between populated areas have forced the city's infrastructure to near-collapse. The Detroit-Warren-Livonia run, the main commuter travel path for the middle class working population is the second worst in the United States, as identified by Woolsey for Forbes.com in 2008.

Detroit is losing population and has one of the worst commutes in America. Transit design in Motown is, not unexpectedly, tailored to the car, yet traffic patterns aren't smooth...When you add up all the people that walk, carpool or take public transit to work, it's only 11% of the Detroit commuting population; that's the worst of any big city in America. (Woolsey, M., 2008)

**Table 8.1 - Mosaic USA Types of Sydney's control group in Detroit**

Type	Label	Description	% Detroit	% USA
S69	Soul Survivors	Older, down-scale African-American singles and single parents established in modest urban neighbourhoods	32.64	1.32
R67	Hope for Tomorrow	Young, low-income African American single parents in second city apartments	17.78	1.03
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	10.89	1.45
P59	Nuevo Horizons	Middle-aged, mid-scale income Hispanic families living mainly within US border cities	2.26	1.26
P60	Humble beginnings	Multi-ethnic singles and single-parent households with mid-scale incomes in city apartments	0.59	1.12
R66	Cuidad Strivers	Mid-scale Hispanic families and single parents in gateway communities	0.58	1.89
P56	Rolling the Dice	Middle aged, mid scale singles and divorced individuals in secondary cities	0.63	1.69
TOTAL			65.37	9.76

Source: adapted from Experian Mosaic USA Interactive Guide, 2011

The analysis process for the profiling of Detroit was carried out by identifying the top three dominant Types by zipcode in Detroit. The tabulated detail of this analysis can be found in Appendix B. The Mosaic Profile for Detroit shows that while there are only seven Types in total that make up the Mosaic USA equivalents of Sydney's control group in Detroit, they make up a staggering 65.37% of the overall population of Detroit. Indeed, there are more of these Types of households in Detroit than there are in Sydney.

The bulk of the population of Detroit is shown to be made up of only a small number of Mosaic Types indicating that while there is a large African American population in the city (indeed, a majority), there is little ethnic or economic diversity. The housing typologies also remain fairly low density with an over-representation of detached housing in 46.42% of the population. The higher density groups are only in medium density formations of up to nine units.

Table 8.2 indicates the direct relationship between the control group in Sydney and Detroit, and the likelihood of these types to live in detached housing in each city.

**Table 8.2 – Comparison of Sydney's control group and Detroit's control group equivalents**

	% control group	% of control group living in detached housing	% population control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>Detroit</b>	65.37%	71.01%	46.42%

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

In four out of the seven identified Types that correlate with Sydney's control group, there is an over-representation of detached single dwellings. These Types alone account for over 46% of Detroit's population.

The economic downturn has forced Detroit's hand into implementing measures that should have been implemented many years ago. The passive planning and inaction of policy makers, as well as pandering to the whims of the city's auto industry and market has created a situation that has seen the decline of all of the parties involved to near extinction. The government of Detroit now plans to implement some difficult decisions which involve relocating existing residents from sparsely populated areas in order to ensure the continued operation of the city's infrastructure.

## Conclusion

As evidenced by the market assessment carried out in Chapters 1 and 2, there is an inherent dichotomy in the desires of Sydneysiders and in their micro and macro aspirations for the city. While there is a desire for a continued low density profile for the city, and large suburban homes, there is also a desire for Sydney to take its place amongst the global powerhouses and to secure global opportunities for the continued prosperity of the city.

With the aging of the population, and a general trend towards smaller households (not unique to Australia and observed in all of the cities subject to this study) the largest of the compromises households have been prepared to make have tended to be in the actual features of the dwelling, traditionally most important to young families. There has been a hitherto disproportionate focus on young families as the dominant household type. This focus will need to shift as there is already a significant shortage of appropriately priced and sized housing across the city in a variety of densities, and not just on the urban fringes.

These findings are in stark contrast to the widely publicised and sensationalist figures published annually in the mass media in Australia. A brief interrogation of the figures published indicates them to be neither comprehensive nor rigorous in their assessments. The widely publicised findings of reports such as Demographia's Annual International Housing Affordability Survey has had a negative impact on the image of higher density housing, and has succeeded in ensuring that land releases continue to form a part of any housing strategy proposed for the city in fear of alienating the 'Aussie battler' and 'aspirational' electorates.

Furthermore, as indicated in Chapter 3, housing in Australia has traditionally been associated with detached home ownership and supported by an incentivised taxation system that made any other choice difficult.

The Mosaic profile for Sydney indicates that the control group forms over 40% of the overall population of the city and tend to live over 20km from the city centre. When aligned with the same groups globally, it was found that in London, New York and Copenhagen, the majority of the control group, to whom the housing features characterised by an abundance of space inside the home and out are most important, tended mostly not to live in the confines of the city at all but to live in surrounding towns with their own sets of local amenities and infrastructure, and where required, commuting to centralised services in the city. This has had the effect of maintaining the confines of the city and ensuring that the area of the city remains sustainable for the provision of infrastructure of services. A few factors have contributed to this outcome.

In Detroit, however, the percentage of aspirational equivalents in the failing city was found to be an astounding 65.37% of the total population of the city. While this is mainly due to the legacy of the city as one of the heartland of the American Dream (and American industry), it is also due to the shortage of available housing stock in forms that allow for any other kind of lifestyle, and the influence of current stock on the aspirations of its residents. As with Sydney, the physical area that the city covers is so large, residents can be living in semi-rural areas many miles from the city and still be considered to be living in Detroit, due to the city's ill-defined boundaries.

A brief snapshot of the findings from each city can be seen in Table 9.1, showing the percentage of the control group equivalents in Sydney, and each of the cities assessed in this study.

**Figure 9.1 – Global Comparison of the control group in Sydney, London, New York, Copenhagen and Detroit**

	% control group	% of control group living in detached housing	% population control group and in detached housing
<b>Sydney</b>	43.20%	100%	43.20%
<b>London</b>	8.28%	0.00%	0.00%
<b>New York City</b>	58.64%	0.00%	0.00%
<b>Copenhagen</b>	27.92%	22.17%	6.19%
<b>Detroit</b>	65.37%	71.01%	46.42%

Source: adapted from Experian Mosaic USA Interactive Guide, 2011, unpublished Mosaic Denmark data, courtesy of Experian UK 2011, Mosaic UK Interactive Guide, Experian, 2011

The lesson from London, New York and Copenhagen is that defining the boundaries of the city, and prioritising the maintenance of those boundaries is the first step in ensuring that service provision for the city remains at a manageable and sustainable level. While a gift of the New York topography is its peninsular form which naturally confines the limitations of the city, in London and Copenhagen, this confinement was achieved by instating and strictly maintaining a greenbelt around the city limits. It also ensures that funding that would otherwise be focussed on providing expensive roads and services to the far flung corners of the city, can be focussed on providing reliable public transport lines and roads to satellite towns, while the provision of localised services can be the responsibility of focussed efforts of local councils within the satellite towns.

None of the three pro-actively planned cities were without their flaws, with each, as the financial capitals of their respective countries facing growing chasms between the rich and the poor. Each city is aiming to bridge this gap by providing an increased amount of focused services provision to the long-term financially disadvantaged in their cities.

The provision of reliable and extensive public transport systems was also a feature of all three cities. In all three cases, there has been a concerted effort and focus on the provision of housing around public

transport lines and not the other way around. In New York, it has led to a highly efficient system which aims to ensure that the outstanding majority of the city's population are within a short walk of a subway stop, further reducing the need to rely on private car and clearing the roads inside the city of congestion and its air of traffic emissions.

The key feature of all three cities was the focus on so called 'stretch' targets well beyond the norm for most cities. In London, the stretch goal is the access of all residents to nature and open space. In New York, it is the aforementioned easy and universal access to reliable, efficient and affordable public transport, and in Copenhagen, it is the achievement of the aim to be entirely carbon neutral without relying on offsets by the year 2025.

These are the kind of stretch targets that are currently out of the reach of a sprawling city like Sydney, as it is focussed on the provision of far more basic needs for its residents such as reliable roads, public transport and affordable housing. It is certainly currently outside the reach of Detroit, which is focussing its efforts simply on survival.

The danger for Sydney is that fear driven policy and media induced panic about the implications of higher density development will continue to drive the demand for detached housing and subsequently, sprawl, to well beyond what the city can service. In a worst case scenario, should adverse economic conditions ever come to fruition, to face a Detroit-like future.

In order to meet Sydney's macro aspirations of growth on a global scale, it is important for the strategic planning of the city to address the unchecked sprawl that has become a burden on the provision of infrastructure to the city. While this may mean that Sydneysiders will have to adapt to living in higher density dwellings, it will, as demonstrated through the Mosaic analyses of other cities around the world, ensure that those for whom living close to the city centre is an important factor will continue to live in the city and will readily make the sacrifice of living in smaller better designed dwellings, should more of this type of housing become available. The main problem in Sydney is one of supply – there simply isn't enough affordable choice with regard to housing types in the suburbs in which people want to live.

It is for these reasons that it can also be surmised that the days of allowing the Great Australian Dream to drive development are long since gone – not simply because the city can no longer bear this burden, though this is an important driver, but because with the changing needs of the population, it is simply not aligned with the complex desires of the people anymore.

For this very reason it is important to assess and interrogate the available market data using geo-demography tools and consumer segregation data, as the needs of the population of cities are no longer as simple as they once were. Developers and private enterprises have already started to use this information to drive solutions tailored to their desired outcomes, and it is important for public policy

drivers and strategists to make use of all of the available information to make informed choices for the city.

This does not mean that the Australian egalitarian cultural ideals of opportunities for all, inherent in the concept of the Great Australian Dream, should be abandoned, rather that the new Great Australian Dream should be redefined to embrace the true meaning of sustainable development to ensure that equitable access to quality housing opportunities are available to future generations of Sydneysiders and that current generations assume responsibility and stewardship of the city for their own development activities to allow future generations of Australians the ability to realise their own Great Australian Dream.

## Appendix A – London

Mosaic Data for London was drawn from the public online Mosaic UK Interactive Guide. A description of each of the Types indicated in the area where the black and red boxes overlap for the United Kingdom in Table A was examined. The Types in the smaller red boxes were found to be those which correspond with Sydney's control group.

Table A – Mosaic Global Look Up Table (Sydney's control group highlighted)

	A	B	C	D	E	F	G	H	I	J
	Sophisticated Singles	Bourgeois Prosperity	Career and Family	Comfortable Retirement	Routine Service Workers	Hard Working Blue Collar	Metropolitan Strugglers	Low Income Elders	Post Industrial Survivors	Rural Inheritance
Australia:	B07, C09 C10, C11	A01, A02, A03, A04, A05, B06	B08, D12, D13, D14, F20	H29, H30	E17, F21, G26, H32, J39	E19, F24, H31	E18, F25, G27, G28, J38, K44	J40, J41, J42, K45, K46, K47	D15, E16, F22, F23, K43	I33, I34, I35, I36, I37
Denmark:	D11, D12, D13, D14	A01, A02, A03, B04	B05, B06, B07, C08, C09, C10	G23, H26, H27, H28, J33	E15, E16	F21, I30, I31, K35	E17, F18, F19, F20	F22, G24, G25	I29	J32, J34, K36, K37
UK: (67 types)	A01, O62, O63, O64, O66, O67, G29, H34	A02, A03, A04, B07, B10	B05, B08, B09, F24, F27, G31, G32, F28, G33, O61, G30	B06, D19, E20, E22, E23	F25, D16, H37, F26, H35, H36, N60	D18, D17, I39, M56	I41, J43, J44, K45, K46, K47, K48, K49, O65	E21, J42, L50, L51, L52, L53, M54	M55, I38, I40, N57, N58, N59	C12, C11, C13, C14, C15
USA:	G24, G25, A01, A02, A03, A04	A01, A02, A03, A04	A01, A02, A03, A04	C12, J34, G62, Q64	D16, D18, E20, H26, H27, H28, H29, I30, I33, K38, K39, O50, O55	I31, I32, J36, M45, N47, O51, P56	K40, O52, O53, O54, P57, P58, P59, P60, P61, R66, R67, S69, S70	M41, Q65, S70		

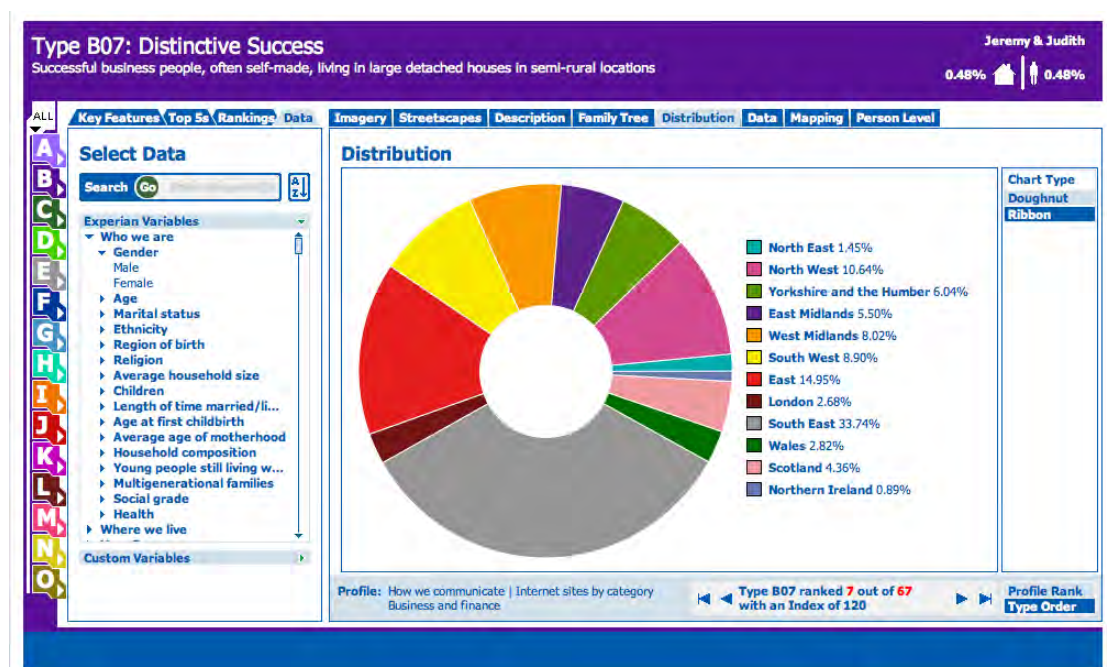
The smaller red boxes indicate matching Mosaic types to Sydney's control group

The black box indicates the UK types – where the black and red boxes overlap, indicates the matching groups to Sydney's control group

Source: adapted from Mosaic Global Look Up table, courtesy of Experian UK, 2011

The percentage representation of each Type in London at both a population and household level has been derived from the Mosaic UK Distribution Chart. An example is shown in Figure A below.

Figure A1 – Distribution Chart of percentage representation of Type B07 in the United Kingdom

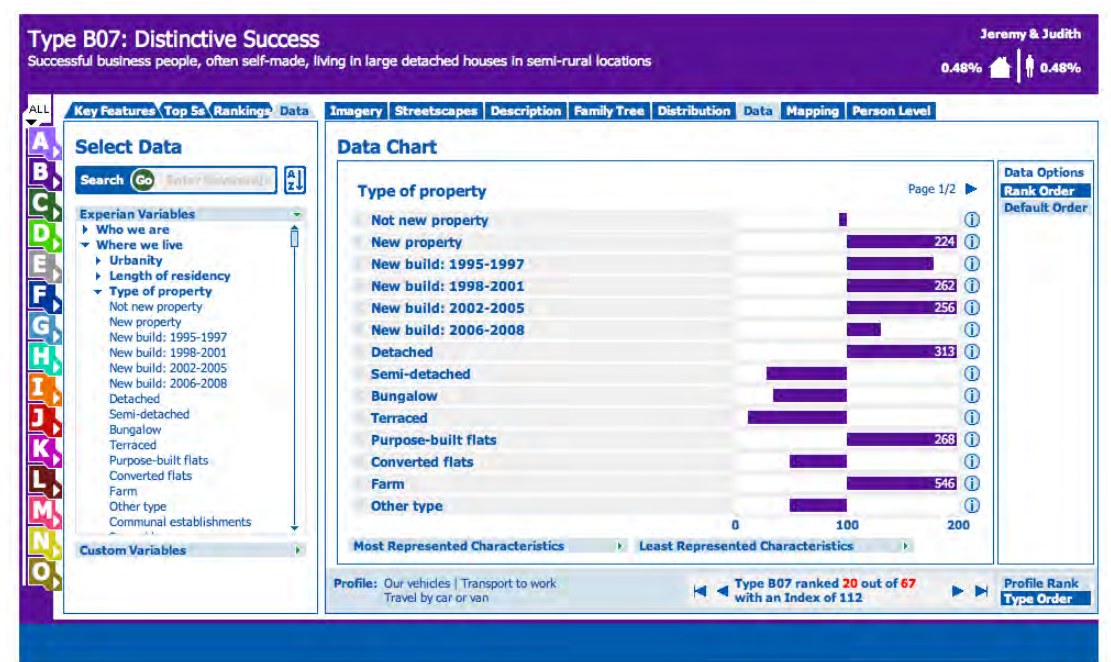


Source: Mosaic UK Interactive Guide, Experian, 2011

The percentage representation of each type is then collated and expressed as a percentage of the overall population by household of London as defined by the Office for National Statistics, July 2010 data. The area marked as London in both Mosaic and census data relates directly to the area known as Greater London.

The type of housing for each Mosaic Type was also examined. An example of the Mosaic output is seen in Figure A2 below, which shows the property types for the example Type B07. A representation of 100 represents direct alignment with the United Kingdom average while numbers over or under this figure represent an over or under-representation for each particular type of housing respectively for this Mosaic Type.

Figure A2 – Mosaic Data Chart – Type of Property



Source: Mosaic UK Interactive Guide, Experian, 2011

While housing type data has not been specifically tabulated for London, the percentage representation of each Mosaic Type in London is indicative enough to show the trends pertinent to this study – that is, that the Types to whom detached living is most important will live outside of the confines of the Greater London Area in semi rural settings, with only a small percentage of each type actually choosing to live in London.

## Appendix B - New York and Detroit

Mosaic Data for New York and Detroit was primarily drawn from the public online Mosaic tool at <http://guides.business-strategies.co.uk/mosaicusa2011/html/visualisation.htm>. A description of each of the Types indicated in the area where the black and red boxes overlap for the United States in Table B1 was examined. The Types in the smaller red boxes were found to be those which correspond with Sydney's control group.

Table B1 – Mosaic Global Look Up Table (Sydney's control group highlighted)

	A	B	C	D	E	F	G	H	I	J
	Sophisticated Singles	Bourgeois Prosperity	Career and Family	Comfortable Retirement	Routine Service Workers	Hard Working Blue Collar	Metropolitan Strugglers	Low Income Elders	Post Industrial Survivors	Rural Inheritance
Australia:	B07, C09 C10, C11	A01, A02 A03, A04 A05, B06	B08, D12 D13, D14 F20	H29, H30	E17, F21, G26, H32, J39	E19, F24 H31	E18, F25, G27, G28, J38, K44	J40, J41, J42, K45, K46, K47	D15, E16 F22, F23 K43	I33, I34, I35, I36, I37
Denmark:	D11, D12, D13, D14	A01, A02, A03, B04	B05, B06, B07, C08, C09, C10	G23, H26, H27, H28, J33	E15, E16	F21, I30, I31, K35	E17, F18, F19, F20	F22, G25		
		B05, B08 B09, F24 F27, G31 G32, F28 G33, O61, G30		B06, D19, E20, E22, E23	F25, D16, H37, F26 H35, H36, N60	D18, D17 I39, M56	I41, J43, J44, K45, K46, K47, K48, K49, Q65	E21, L50, L52, M54		
USA:	G24, G25, K37	A01, A02 A05, A06 C11, C13, C14, E19, E21	A03, A04 B07, B08 B09, B10 D15, D17 F22, F23	C12, J34, Q62, Q64	D16, D18 E20, H26 H27, H28 H29, I30, I33, K38, K39, O50, Q65	I31, I32, J36, M45 N47, O51, P56	K40, O52, O53, O54, P57, P58 P59, P60, P61, R66, R67, S69, S70	L41, Q63, Q65, S71	J35, L42, N48, S68	L43, M44, N46, N49

The smaller red boxes indicate matching Mosaic types to Sydney's control group

The black box indicates the US types – where the black and red boxes overlap, indicates the matching groups to Sydney's control group

Source: adapted from Mosaic Global Look Up table, courtesy of Experian UK, 2011

The percentage representation of each Type in New York and Detroit at both a population and household level has been derived differently than the method outlined for the United Kingdom. Mosaic USA's Zip Code search was used, which provided the top three Mosaic Types found in each Zip Code. The population for each Zip Code was then derived from US Census Bureau data for 2011.

### New York

The data for New York was divided into the five boroughs. The tabulated data showing the top three Types in each zip code in each borough can be seen in the following tables on the following pages:

- Table B2 – Manhattan
- Table B3 – Manhattan Summary
- Table B4 – Queens
- Table B5 – Queens Summary
- Table B6 – Brooklyn
- Table B7 – Brooklyn Summary
- Table B8 – Bronx

- Table B9 – Bronx Summary
- Table B10 – Staten Island
- Table B11 – Staten Island Summary

The summary tables indicate the top Types found in each borough. In the context of these tables, columns entitled Number refer to the number of persons. This has been extrapolated from the percentage of the relevant Mosaic Type expressed as a figure of the overall population of the Zip Code.

**Table B2 – Top Mosaic Types in Manhattan by Zip Code**

Zipcode	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
10034	P58	22.99	P61	20.4	K39	15.85	43994	P58	10114	P61	8975	K39	6973
10040	P58	50.24	P61	9.37	K38	8.69	51407	P58	25827	P61	4817	K38	4467
10033	P58	46.02	K38	9.84	K39	9.39	60892	P58	28022	K38	5992	K39	5718
10039	P57	64.29	S71	9.51	Q65	8.57	21632	P57	13907	S71	2057	Q65	1854
10031	P58	33.37	P57	31.82	P61	8.7	64587	P58	21553	P57	20552	P61	5619
10027	P57	47.7	G25	8.97	A06	7.07	59213	P57	28245	G25	5311	A06	4186
10035	P57	35.9	S71	17.64	P58	15.65	35905	P57	12890	S71	6334	P58	5619
10026	P57	61.77	P58	5.58	S71	5.54	32601	P57	20138	P58	1819	S71	1806
10025	A06	52.66	G25	22.09	Q65	5.36	100713	A06	53035	G25	22248	Q65	5398
10029	P57	33.99	P58	23.4	P61	8.21	79304	P57	26955	P58	18557	P61	6511
10030	P57	70.99	S71	5.47	P61	3.95	29159	P57	20700	S71	1595	P61	1152
10037	P57	53.24	S71	15.6	Q65	10.3	18648	P57	9928	S71	2909	Q65	1921
10024	A06	81.02	G25	14.13	Q65	1.66	63114	A06	51135	G25	8918	Q65	1048
10128	A06	64.33	G25	27.27	Q65	2.36	65674	A06	42248	G25	17909	Q65	1550
10016	A06	60.41	G25	33.07	Q65	2.38	53644	A06	32406	G25	17740	Q65	1277
10001	G25	36.84	A06	36.5	Q65	8.59	17499	G25	6447	A06	6387	Q65	1503
10032	P58	41.39	P57	14.86	P61	10.11	67918	P58	28111	P57	10093	P61	6867
10023	A06	75.76	G25	16.27	Q65	3.05	66912	A06	50693	G25	10887	Q65	2041
10021	A06	78.39	G25	17.34	Q65	1.95	83980	A06	65832	G25	14562	Q65	1638
10019	A06	52.03	G25	31.87	Q65	3.52	37603	A06	19565	G25	11984	Q65	1324
10022	A06	81.35	G25	15.57	Q65	1.91	31824	A06	25889	G25	4955	Q65	608
10036	G25	40.93	A06	34.37	Q65	4.51	20307	G25	8312	A06	6980	Q65	916
10017	A06	63.05	G25	30.48	Q65	2.5	18557	A06	11700	G25	5656	Q65	464
10018	G25	55.3	A06	26.38	O54	5.35	4235	G25	2342	A06	1117	O54	227
10010	A06	63.96	G25	27.8	Q65	4.61	28227	A06	18054	G25	7847	Q65	1301
10011	A06	66.32	G25	26.42	Q65	2.02	48918	A06	32442	G25	12924	Q65	988
10014	A06	68.16	G25	28.13	Q65	1.09	34708	A06	23657	G25	9763	Q65	378
10012	A06	52.89	G25	34.45	P58	3.13	27311	A06	14445	G25	9409	P58	855
10002	P58	35.22	K38	14.03	S71	9.93	89154	P58	31400	K38	12508	S71	8853
10007	A06	78.96	G25	15.64	K38	1.07	3721	A06	2938	G25	582	K38	40
10038	A06	29.79	G25	25.1	P58	13.8	16988	A06	5061	G25	4264	P58	2344
10280	A06	78.79	G25	19.94	Q65	0.46	7348	A06	5789	G25	1465	Q65	34
10006	G25	55.76	A06	35.76	O54	7.78	4096	G25	2284	A06	1465	O54	319
10005	G25	64.17	A06	26.07	O54	7.3	1666	G25	1069	A06	434	O54	122
10004	A06	60.37	G25	29.91	K39	2.98	902	A06	545	G25	270	K39	27
<b>TOTAL</b>							<b>1392361</b>						

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B3 –Top Types in Manhattan (Summary)

Type	Label	Description	Number	%
	Jet Set Urbanites	Mix of affluent singles and couples living high rise, fashionable lives in urban neighbourhoods	476003	34.19
G25	Urban Edge	Younger, up-and-coming singles living big city lifestyles located within top CBSA markets	187148	13.44
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	174222.2	12.51
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	163407.1	11.74
P61	Humble beginnings	Multi-ethnic singles and single-parent households with mid-scale incomes in city apartments	33940	2.44
J55	Senior Discounts	Downscale, settled retirees in metro apartment communities	24242	1.74
S71	Hard Times	Older, down-scale and ethnically-diverse singles typically concentrated in inner city apartments	23554.02	1.69
K38	Gotham Blend	Mix of middle aged and middle class singles and couples living urban New York City area lifestyles	23007	1.65
K39	Metro Fusion	Ethnically diverse, middle aged singles living urban, active lifestyles	12718	0.91
			<b>1118241</b>	<b>80.31</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B4 – Top Mosaic Types in Queens by Zip Code

Area (Zipcode)	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
Arverne (11692)	P57	40.23	D18	9.33	O52	7.73	15089	P57	6070	D18	1408	O52	1166
Astoria (11102)	K38	44.07	P58	26.22	K39	10.42	34133	K38	15042	P58	8950	K39	3557
Astoria (11103)	K38	64.87	P58	22.29	K39	7.39	38780	K38	25157	P58	8644	K39	2866
Astoria (11105)	K38	79.05	P58	8.22	K39	5.89	36688	K38	29002	P58	3016	K39	2161
Astoria (11106)	K38	44.94	P58	18.92	K39	13.11	38975	K38	17515	P58	7374	K39	5110
Bayside (11360)	E19	29.23	K38	23.94	B10	9.39	18743	E19	5479	K38	4487	B10	1760
Bayside (11361)	K38	40.75	B10	19.65	H26	7.89	24924	K38	10157	B10	4898	H26	1967
Bellerose (11426)	H26	29.66	K38	22.47	B10	18.92	15727	H26	4665	K38	3534	B10	2976
Breezy Point (11697)	C11	14.42	L41	12.52	J34	10.17	6540	C11	943	L41	819	J34	665
Cambria Heights (11411)	D18	61.73	K38	9.99	P57	9.61	16928	D18	10450	K38	1691	P57	1627
College Point (11356)	K38	57.27	P58	14.42	H26	12.32	18394	K38	10534	P58	2652	H26	2266
Corona (11368)	P58	68.52	K38	12.77	P57	7.26	80353	P58	55058	K38	10261	P57	5834
East Elmhurst (11369)	P58	38.63	K38	31.5	I32	10.88	25156	P58	9718	K38	7924	I32	2737
East Elmhurst (11370)	K38	62.59	P58	25.34	I32	3.5	19958	K38	12492	P58	5057	I32	699
Elmhurst (11373)	P58	53.53	K38	34.39	K39	5.07	79819	P58	42727	K38	27450	K39	4047
Elmhurst (11380)	N/A							N/A	0	0	0	0	0
Far Rockaway (11690)	N/A							N/A	0	0	0	0	0
Far Rockaway (11691)	P57	34.22	K38	10.86	S71	7.8	55183	P57	18884	K38	5993	S71	4304
Far Rockaway (11693)	K38	32.66	P57	13.4	P58	5.11	11819	K38	3860	P57	1584	P58	604
Far Rockaway (11695)	N/A							N/A	0	0	0	0	0
Floral Park (11005)	Q65	56.63	Q63	26.54	C12	13.53	2413	Q65	1366	Q63	640	C12	326
Flushing (11351)	N/A							N/A	0	0	0	0	0
Flushing (11352)	N/A							N/A	0	0	0	0	0
Flushing (11354)	K38	40.14	P58	18.69	K39	13.3	50783	K38	20384	P58	9491	K39	6754
Flushing (11355)	K38	42.05	P58	25.08	K39	14.47	77590	K38	32627	P58	19460	K39	11227
Flushing (11358)	K38	43.91	B10	25.63	H26	5.99	33633	K38	14768	B10	8620	H26	2015
Flushing (11367)	K38	47.68	K39	9.76	B10	9.46	38964	K38	18578	K39	3803	B10	3686
Flushing (11371)	N/A							N/A	0	0	0	0	0
Flushing (11381)	N/A							N/A	0	0	0	0	0
Flushing (11390)	N/A							N/A	0	0	0	0	0
Forest Hills (11375)	K38	35.7	A06	17.12	G25	12.62	69010	K38	24637	A06	11815	G25	8709
Fresh Meadows (11365)	K38	36.69	B10	33.1	K39	6.92	40016	K38	14682	B10	13245	K39	2769
Fresh Meadows (11366)	G25	64.17	A06	26.07	O54	7.3	12526	G25	8038	A06	3266	O54	914
Glen Oaks (11004)	A06	60.37	G25	29.91	K39	2.98	12363	A06	7464	G25	3698	K39	368
Hollis (11423)	K38	28.59	P57	18.61	P58	9.42	24242	K38	6931	P57	4511	P58	2284
Howard Beach (11414)	K38	32.05	D16	10.9	Q65	7.43	23999	K38	7692	D16	2616	Q65	1783
Jackson Heights (11372)	P58	42.79	K38	36.28	K39	8.72	64025	P58	27396	K38	23228	K39	5583
Jamaica (11405)	N/A							N/A	0	0	0	0	0
Jamaica (11424)	N/A							N/A	0	0	0	0	0
Jamaica (11425)	N/A							N/A	0	0	0	0	0
Jamaica (11430)	H26	69.66	O51	7.3	I33	6.74	3	H26	2	O51	0	I33	0
Jamaica (11431)	N/A							N/A	0	0	0	0	0
Jamaica (11432)	K38	37.16	P58	19.7	B10	8.46	53106	K38	19734	P58	10462	B10	4493
Jamaica (11433)	P57	44.47	D18	19.55	P58	6.87	27000	P57	12007	D18	5279	P58	1855
Jamaica (11434)	P57	35.92	D18	26.2	K38	7.42	52457	P57	18843	D18	13744	K38	3892
Jamaica (11435)	K38	29.63	P58	23.64	P57	15.3	45868	K38	13591	P58	10843	P57	7018
Jamaica (11436)	D18	32.61	P57	28.74	O52	7.19	15384	D18	5017	P57	4421	O52	1106
Jamaica (11439)	N/A							N/A	0	0	0	0	0
Jamaica (11451)	N/A							N/A	0	0	0	0	0
Jamaica (11499)	N/A							N/A	0	0	0	0	0
Kew Gardens (11415)	K38	53.49	K39	23.46	P58	5.45	19122	K38	10228	K39	4486	P58	1042
Little Neck (11362)	K38	28.64	B10	28.18	E19	12.71	14578	K38	4175	B10	4108	E19	1853
Little Neck (11363)	B10	23.25	K38	15.13	C13	13.8	6812	B10	1584	K38	1031	C13	940
Long Island City (11101)	P58	19.98	P57	18.07	K38	17.46	25175	P58	5030	P57	4549	K38	4396
Long Island City (11109)	G25	59.67	A06	19.92	O54	7.34	3885	G25	2318	A06	774	O54	285
Long Island City (11120)	N/A							N/A	0	0	0	0	0
Maspeth (11378)	K38	67.61	H26	13.22	P58	8.62	24596	K38	16629	H26	3252	P58	2120
Middle Village (11379)	K38	60.77	H26	15.11	D16	5.82	27282	K38	16579	H26	4122	D16	1588
Oakland Gardens (11364)	B10	37.4	K38	32.32	E19	6.95	33090	B10	12376	K38	10695	E19	2300
Ozone Park (11416)	P58	48.24	K38	38.55	I32	8.48	15688	P58	7568	K38	6048	I32	1330
Ozone Park (11417)	K38	48.66	P58	24.73	H26	17.38	21600	K38	10511	P58	5342	H26	3754
Queens Village (11427)	K38	37.54	H26	13.44	B10	12.38	21457	K38	8055	H26	2884	B10	2656
Queens Village (11428)	K38	38.71	H26	27.74	B10	8.59	16867	K38	6529	H26	4679	B10	1449
Queens Village (11429)	D18	34.04	K38	30.6	P57	21.49	20465	D18	6966	K38	6262	P57	4398
Rego Park (11374)	K38	68.99	K39	12.7	B10	7.33	43952	K38	30322	K39	5582	B10	3222
Richmond Hill (11418)	P58	41.05	K38	39.86	I32	6.69	29796	P58	12231	K38	11877	I32	1993
Ridgewood (11385)	K38	52.39	P58	33.59	H26	5.67	70,979	K38	37186	P58	23842	H26	4025
Ridgewood (11386)	N/A							N/A	0	0	0	0	0
Rockaway Park (11694)	K38	15.54	C13	11.33	E19	10.32	17329	K38	2693	C13	1963	E19	1788
Rosedale (11422)	K38	54.14	D18	21.81	P57	11.89	24137	K38	13068	D18	5264	P57	2870
Saint Albans (11412)	D18	43.25	P57	26.75	K38	7.43	29877	D18	12922	P57	7992	K38	2220
South Ozone Park (11420)	K38	41.98	P58	15.07	H26	11.14	33716	K38	14154	P58	5081	H26	3756
South Richmond Hill (11419)	P58	40.49	K38	37.92	I32	9.09	31984	P58	12950	K38	12128	I32	2907
Springfield Gardens (11413)	D18	43.02	P57	20.06	K38	18.22	32405	D18	13941	P57	6500	K38	5904
Sunnyside (11104)	K38	43.53	K39	24.85	P58	19.72	27202	K38	11841	K39	6760	P58	5364
Whitestone (11357)	K38	34.8	H26	11.67	B10	10.24	33937	K38	11810	H26	3960	B10	3475
Woodhaven (11421)	K38	39.66	P58	34.43	I32	12.15	29769	K38	11806	P58	10249	I32	3617
Woodside (11377)	K38	41.53	P58	36.54	K39	8.72	75316	K38	31279	P58	27520	K39	6568
							1911607						0

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B5 – Top Types in Queens (Summary)

Type	Label	Description	Number	%
K38	Gotham Blend	Mix of middle aged and middle class singles and couples living urban New York City area lifestyles	683268	35.74
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	343931	17.99
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	107108	5.60
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	74989	3.92
K39	Metro Fusion	Ethnically diverse, middle aged singles living urban, active lifestyles	71640	3.75
B10	Asian Achievers	Affluent, mainly Asian couples and families enjoying dynamic lifestyles in metro areas	68547	3.59
H26	Progressive Potpourri	Mature, multi ethnic couples with comfortable and active lives in middle class suburbs	41346	2.16
A06	Jet Set Urbanites	Mix of affluent singles and couples living high rise, fashionable lives in urban neighbourhoods	23317	1.22
G25	Urban Edge	Younger, up-and-coming singles living big city lifestyles located within top CBSA markets	22763	1.19
E19	Full Pockets, Empty Nests	Empty nesting, upper middle class households with discretionary income living sophisticated lifestyles	11420	0.60
I32	Latin Flair	Conventional Hispanic Gen X families located in selected coastal city homes	13283	0.69
S71	Hard Times	Older, down-scale and ethnically-diverse singles typically concentrated in inner city apartments	4304	0.23
D16	Settled in Suburbia	Upper middle class diverse family units and empty nesters living in established suburbs	4204	0.22
Q65	Senior Discounts	Downscale, settled retirees in metro apartment communities	3150	0.16
C13	Silver Sophisticates	Mature upscale couples and singles in suburban homes	2903	0.15
O52	Urban Ambition	Mainly generation Y African American singles and single families established in mid-market cities	2272	0.12
O54	Striving Single Scene	Young, multi-ethnic singles living in Midwest and Southern city centres	1200	0.06
C11	Aging of Aquarius	Upscale boomer aged couples living in city and close-in suburbs	943	0.05
L41	Booming and Consuming	Older empty nesting couples and singles enjoying relaxed lives in small towns	819	0.04
J34	Aging in Place	Middle class seniors living solid suburban lifestyles	665	0.03
Q63	Footloose and Family Free	Elderly couples and widowed individuals living active and comfortable lifestyles	640	0.03
C12	Golf Carts and Gourmets	Upscale retirees and empty nesters in comfortable communities	326	0.02
O51	Digital Dependents	Mix of Generation Y and X singles who live digital driven, urban lifestyles	0	0.00
I33	Hispanic Harmony	Middle class Hispanic families living lively lifestyles in city-centric neighborhoods	0	0.00
			<b>1483040</b>	<b>77.58</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B6 – Top Mosaic Types in Brooklyn by Zip Code

Area (Zipcode)	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
11201	A06	42.32	G25	26.69	P57	6.7	51593	A06	21834	G25	13770	P57	3457
11202	N/A							N/A	0	0	0	0	0
11203	P57	45.08	K38	41.54	D18	6.7	59906	P57	27006	K38	24885	D18	4014
11204	K38	81.13	P58	10.81	H26	2.19	68322	K38	55430	P58	7386	H26	1496
11205	P57	31.8	P58	13.93	K38	13.76	36709	P57	11673	P58	5114	K38	5051
11206	P57	31.24	P58	28.75	K38	9.06	79396	P57	24803	P58	22826	K38	7193
11207	P58	53.28	P58	15.78	K38	7.02	75308	P58	40124	P58	11884	K38	5287
11208	P58	35.77	P57	33.58	K38	11.96	72099	P58	25790	P57	24211	K38	8623
11209	K38	53.16	K39	9.25	E19	7.21	63634	K38	33828	K39	5886	E19	4588
11210	K38	39.24	P57	31.14	D18	5.02	57099	K38	22406	P57	17781	D18	2866
11211	K38	32.22	P58	28.78	G25	8.41	60416	K38	19466	P58	17388	G25	5081
11212	P57	72.26	K38	8.09	D18	5.35	76453	P57	55245	K38	6185	D18	4090
11213	P57	67.3	K38	18.6	P58	3.57	57925	P57	38984	K38	10774	P58	2068
11214	K38	82.19	P58	9.05	Q65	3.54	76211	K38	62638	P58	6897	Q65	2698
11215	K38	26.99	G25	23.55	A06	18.72	57275	K38	15459	G25	13488	A06	10722
11216	P57	71.83	K38	11.1	P58	5.32	46003	P57	33044	K38	5106	P58	2447
11217	G25	31.88	A06	18.36	K38	15.16	30510	G25	9727	A06	5602	K38	4625
11218	K38	62.72	P58	17.5	P57	3.88	68351	K38	42870	P58	11961	P57	2652
11219	K38	73.75	P58	20.89	Q65	1.09	76305	K38	56275	P58	15940	Q65	832
11220	P58	54.82	K38	33.71	I32	3.11	72777	P58	39896	K38	24533	I32	2263
11221	P57	55.25	P58	22.19	K38	8.22	66161	P57	36554	P58	14681	K38	5438
11222	K38	72.17	P58	13.69	K39	4.07	34093	K38	24605	P58	4667	K39	1388
11223	K38	78.14	P58	7.82	P57	2.76	64829	K38	50657	P58	5070	P57	1789
11224	K38	31.28	Q65	22.3	P57	18.01	43898	K38	13731	Q65	9789	P57	7906
11225	P57	62.57	K38	20.57	Q65	3.98	54144	P57	33878	K38	11137	Q65	2155
11226	P57	68.03	K38	15.43	P58	8.44	94834	P57	64516	K38	14633	P58	8004
11228	K38	77.03	E19	3.73	D16	3.43	29719	K38	22893	E19	1109	D16	1019
11229	K38	59.27	B10	6.24	Q65	4.81	71733	K38	42516	B10	4476	Q65	3450
11230	K38	68.2	P58	8.85	Q65	4.53	80290	K38	54758	P58	7106	Q65	3637
11231	G25	22.41	K38	16.46	A06	14.08	30692	G25	6878	K38	5052	A06	4321
11232	P58	62.57	K38	21.25	I32	5.36	22183	P58	13880	K38	4714	I32	1189
11233	P57	72.5	K38	8.17	D18	4.36	58153	P57	42161	K38	4751	D18	2535
11234	K38	51.02	H26	11.19	D16	9.19	74908	K38	38218	H26	8382	D16	6884
11235	K38	64.23	Q65	12.54	P58	7.43	74763	K38	48020	Q65	9375	P58	5555
11236	K38	67.23	P57	24.28	D18	3.67	70852	K38	47634	P57	17203	D18	2600
11237	P58	68.15	P60	10.98	K38	7.7	44872	P58	30580	P60	4927	K38	3455
11238	P57	38.58	K38	17.76	G25	12.93	48223	P57	18604	K38	8564	G25	6235
11239	P57	34.31	S71	23.69	Q65	22.77	14890	P57	5109	S71	3527	Q65	3390
11243	G24	100					473	G24	473	0	0	0	0
							<b>2166002</b>						

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B7 – Top Types in Brooklyn (Summary)

Type	Label	Description	Number	%
A06	Jet Set Urbanites	Mix of affluent singles and couples living high rise, fashionable lives in urban neighbourhoods	42479	1.96
G25	Urban Edge	Younger, up-and-coming singles living big city lifestyles located within top CBSA markets	55179	2.55
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	466575	21.54
K38	Gotham Blend	Mix of middle aged and middle class singles and couples living urban New York City area lifestyles	811410	37.46
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	16106	0.74
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	299264	13.82
H26	Progressive Potpourri	Mature, multi ethnic couples with comfortable and active lives in middle class suburbs	9878	0.46
K39	Metro Fusion	Ethnically diverse, middle aged singles living urban, active lifestyles	7274	0.34
E19	Full Pockets, Empty Nests	Empty nesting, upper middle class households with discretionary income living sophisticated lifestyles	5697	0.26
Q65	Senior Discounts	Downscale, settled retirees in metro apartment communities	35327	1.63
I32	Latin Flair	Conventional Hispanic Gen X families located in selected coastal city homes	3452	0.16
D16	Settled in Suburbia	Upper middle class diverse family units and empty nesters living in established suburbs	7903	0.36
B10	Asian Achievers	Affluent, mainly Asian couples and families enjoying dynamic lifestyles in metro areas	4476	0.21
P60	Cuidad Strivers	Mid-scale Hispanic families and single parents in gateway communities	4927	0.23
S71	Hard Times	Older, down-scale and ethnically-diverse singles typically concentrated in inner city apartments	3527	0.16
G24	Status Seeking Singles	Younger, upwardly mobile singles living in mid-scale metro areas leading leisure intensive lifestyles	473	0.02
			<b>1773949</b>	<b>81.90</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B8 – Top Mosaic Types in the Bronx by Zip Code

Zipcode	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
10451	P57	41.94	S71	13.59	P58	10.28	46472	P57	19490	S71	6316	P58	4777
10452	P57	40.84	P58	26.42	P61	13.46	75366	P57	30779	P58	19912	P61	10144
10453	P57	51.19	P58	22.11	P61	10.67	78148	P57	40004	P58	17279	P61	8338
10454	P57	27.99	P58	15.59	P61	12.86	36993	P57	10354	P58	5767	P61	4757
10455	P58	27.57	P57	25.13	P61	12.16	39456	P58	10878	P57	9915	P61	4798
10456	P57	59.72	P58	13.45	P61	7.52	84724	P57	50597	P58	11395	P61	6371
10457	P57	39.85	P58	24.68	P61	10.15	69958	P57	27878	P58	17266	P61	7101
10458	N/A							N/A	0	0	0	0	0
10459	P57	29.22	P58	22.38	P61	10.49	46826	P57	13683	P58	10480	P61	4912
10460	P57	31.91	P58	25.33	P61	10.41	53354	P57	17025	P58	13515	P61	5554
10461	K38	52.22	P58	9.04	H26	8.3	42348	K38	22114	P58	3828	H26	3515
10462	K38	27.24	P57	20.44	P58	17.43	73230	K38	19948	P57	14968	P58	12764
10463	K38	20.24	Q65	12.76	P58	12.12	65153	K38	13187	Q65	8314	P58	7897
10464	E19	23	C11	10.17	K37	9.76	4138	E19	952	C11	421	K37	404
10465	K38	34.36	H26	25.49	P57	4.66	32194	K38	11062	H26	8206	P57	1500
10466	P57	42.5	K38	30.18	D18	10.77	56005	P57	23802	K38	16902	D18	6032
10467	P57	29.84	P58	19.98	K38	14.71	90605	P57	27037	P58	18103	K38	13328
10468	P58	40.82	P57	18.54	P61	10.4	73528	P58	30014	P57	13632	P61	7647
10469	K38	31.49	P57	29.8	D18	12.65	49964	K38	15734	P57	14889	D18	6320
10470	K38	32.47	P57	22.22	Q65	8.04	13042	K38	4235	P57	2898	Q65	1049
10471	E19	22.42	K38	19.52	A06	18.09	19339	E19	4336	K38	3775	A06	3498
10472	P58	39.12	P57	22.99	K38	18.59	57955	P58	22672	P57	13324	K38	10774
10473	P57	33.01	K38	14.2	P58	11.78	53543	P57	17675	K38	7603	P58	6307
10474	P57	24.3	P60	18.88	P61	14.55	11010	P57	2675	P60	2079	P61	1602
10475	P57	37.52	K38	19.88	Q65	16.75	36659	P57	13754	K38	7288	Q65	6140
10499	N/A							N/A	0	0	0	0	0
							<b>1210010</b>						

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B9 – Top Types in the Bronx (Summary)

Type	Label	Description	Number	%
A06	Jet Set Urbanites	Mix of affluent singles and couples living high rise, fashionable lives in urban neighbourhoods	3498	0.29
P61	Humble Beginning	Multi-ethnic singles and single parent households with mid-scale incomes in city apartments	61225	5.06
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	365881	30.24
K38	Gotham Blend	Mix of middle aged and middle class singles and couples living urban New York City area lifestyles	145949	12.06
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	12352	1.02
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	212853	17.59
H26	Progressive Potpourri	Mature, multi ethnic couples with comfortable and active lives in middle class suburbs	11721	0.97
C11	Aging of Aquarius	Upscale boomer aged couples living in city and close-in suburbs	421	0.03
E19	Full Pockets, Empty Nests	Empty nesting, upper middle class households with discretionary income living sophisticated lifestyles	5288	0.44
Q65	Senior Discounts	Downscale, settled retirees in metro apartment communities	15502	1.28
K37	Wire for Success	Young mid-scale singles and couples living socially active city lives	404	0.03
P60	Cuidad Strivers	Mid-scale Hispanic families and single parents in gateway communities	2079	0.17
S71	Hard Times	Older, down-scale and ethnically-diverse singles typically concentrated in inner city apartments	6316	0.52
			<b>843489</b>	<b>69.71</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B10 – Top Mosaic Types in Staten Island by Zip Code

ZipCode	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
10301	K38	18.19	P57	12.97	P58	7.25	34424	K38	6262	P57	4465	P58	2496
10302	H26	19.22	K38	19.04	P58	8.51	16176	H26	3109	K38	3080	P58	1377
10303	H26	19.86	K38	17.99	P57	9.01	23657	H26	4698	K38	4256	P57	2131
10304	P57	17.27	K38	14.35	H26	7.73	37950	P57	6554	K38	5446	H26	2934
10305	K38	29.67	H26	27.78	D16	4.89	36300	K38	10770	H26	10084	D16	1775
10306	H26	20.03	D16	18.42	K38	14.61	50117	H26	10038	D16	9232	K38	7322
10307	D16	12.16	K37	9.4	B08	6.76	11631	D16	1414	K37	1093	B08	786
10308	D16	32.94	H26	14.03	K38	12.39	23564	D16	7762	H26	3306	K38	2920
10309	D16	13.35	H26	8.92	K37	8.54	26665	D16	3560	H26	2379	K37	2277
10310	K38	15.38	H26	12.03	P57	10.02	22475	K38	3457	H26	2704	P57	2252
10312	D16	27.41	H26	9.21	C11	7.36	51211	D16	14037	H26	4717	C11	3769
10314	K38	24.8	H26	17.95	D16	12.77	71289	K38	17680	H26	12796	D16	9104
							<b>405459</b>						

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

Table B11 – Top Types in Staten Island (Summary)

Type	Label	Description	Number	%
D16	Settled in Suburbia	Upper middle-class diverse family units and empty nesters living in established areas	46883	11.56
B08	Babies and Bliss	Middle-aged couples with large families and active lives in affluent suburbia	786	0.19
P57	Meager Metro Means	Mid-scale African-American singles established in inner-city communities	15402	3.80
K38	Gotham Blend	Mix of middle aged and middle class singles and couples living urban New York City area lifestyles	61192	15.09
P58	Fragile Families	Multi-cultural singles and families with mid and low incomes living settled lives in urban apartments	3872	0.96
H26	Progressive Potpourri	Mature, multi ethnic couples with comfortable and active lives in middle class suburbs	56765	14.00
C11	Aging of Aquarius	Upscale boomer aged couples living in city and close-in suburbs	3769	0.93
K37	Wire for Success	Young mid-scale singles and couples living socially active city lives	3371	0.83
			<b>192040</b>	<b>47.36</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

## Detroit

The data for Detroit was extrapolated in the same way as the data for New York City. The tables for the top three Mosaic Types by Zip Code and the Summary Table are included below. The Zip Codes with no data are representative of areas previously populated that are now abandoned or without sufficient data for inclusion in the census.

**Table B12 – Top Mosaic Types in Detroit by Zip Code**

Zipcode	1st	%	2nd	%	3rd	%	Population	Group	Number	Group	Number	Group	Number
48201	S71	45.26	R67	16.12	O54	7.21	14558	S71	6589	R67	2347	O54	1050
48202	S69	25.37	R67	21.28	S71	12.68	21114	S69	5357	R67	4493	S71	2677
48203	S69	38.73	R67	26.42	S71	6.31	49797	S69	19286	R67	13156	S71	3142
48204	S69	47.01	R67	32.45	D18	4.91	40853	S69	19205	R67	13257	D18	2006
48205	S69	36.2	R67	30.32	D18	13.07	64696	S69	23420	R67	19616	D18	8456
48206	R67	37.97	S69	36.78	D18	7.12	31259	R67	11869	S69	11497	D18	2226
48207	S69	19.6	S71	17.14	R67	15.26	24728	S69	4847	S71	4238	R67	3773
48208	S69	32.15	R67	29.19	S71	10.1	12422	S69	3994	R67	3626	S71	1255
48209	P59	34.22	P60	14.35	R66	12.01	37551	P59	12850	P60	5389	R66	4510
48210	P59	18.18	S69	15.64	R67	13.72	38300	P59	6963	S69	5990	R67	5255
48211	S69	39.87	R67	35.78	N48	5.3	10509	S69	4190	R67	3760	N48	557
48213	S69	46	R67	35.85	D18	4.74	42475	S69	19539	R67	15227	D18	2013
48214	S69	34.8	R67	22.19	S71	15.59	31710	S69	11035	R67	7036	S71	4944
48215	S69	36.81	R67	30.27	D18	7.88	18559	S69	6832	R67	5618	D18	1462
48216	S69	12.65	P59	12.36	R66	11.79	6437	S69	814	P59	796	R66	759
48217	S69	48.52	R67	10.4	N48	8.31	10151	S69	4925	R67	1056	N48	844
48219	S69	29.27	D18	27.11	O52	13.31	57392	S69	16799	D18	15559	O52	7639
48221	S69	30.06	D18	29.57	O52	11.63	43812	S69	13170	D18	12955	O52	5095
48222							NA		0	0	0	0	0
48223	S69	27.17	D18	25.33	R67	20.55	34826	S69	9462	D18	8821	R67	7157
48224	S69	28.58	D18	26.52	O52	17.76	53521	S69	15296	D18	14194	O52	9505
48226	S71	44.5	O54	19.2	G25	9.17	5925	S71	2637	O54	1138	G25	543
48227	S69	41.82	R67	20.57	D18	15.4	59006	S69	24676	R67	12138	D18	9087
48228	S69	31.53	R67	15.74	P56	9.12	62803	S69	19802	R67	9885	P56	5728
48231							NA		0	0	0	0	0
48232							NA		0	0	0	0	0
48233							NA		0	0	0	0	0
48234	S69	46.38	R67	17.57	D18	11.82	44214	S69	20506	R67	7768	D18	5226
48235	S69	35.95	D18	28.32	O52	9.93	51509	S69	18517	D18	14587	O52	5115
48238	S69	42.36	R67	34.65	D18	6.25	43357	S69	18366	R67	15023	D18	2710
48242	NA	NA	NA	NA	NA	NA	1	NA	0	NA	0	NA	0
48243							NA	0	0	0	0	0	0
48244							NA	0	0	0	0	0	0
48255							NA	0	0	0	0	0	0
48260							NA	0	0	0	0	0	0
48264							NA	0	0	0	0	0	0
48265							NA	0	0	0	0	0	0
48266							NA	0	0	0	0	0	0
48267							NA	0	0	0	0	0	0
48268							NA	0	0	0	0	0	0
48269							NA	0	0	0	0	0	0
48272							NA	0	0	0	0	0	0
48275							NA	0	0	0	0	0	0
48277							NA	0	0	0	0	0	0
48278							NA	0	0	0	0	0	0
48279							NA	0	0	0	0	0	0
48288							NA	0	0	0	0	0	0
							911485						

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

**Table B13 – Top Types in Detroit (Summary)**

Type	Label	Description	Number	% Detroit
S69	Soul Survivors	Older, down-scale African-American singles and single parents established in modest urban neighbourhoods	297525	32.64
R67	Hope for Tomorrow	Young, low-income African American single parents in second city apartments	162061	17.78
D18	Soulful Spenders	Upper middle class African American couples and families living in the expanding suburbs	99303	10.89
O52	Urban Ambition	Mainly Generation Y African-American singles and single families established in mid-market cities	27354	3.00
S71	Hard Times	Older, down-scale and ethnically diverse singles typically concentrated in inner-city apartments	25482	2.80
P59	Nuevo Horizons	Middle-aged, mid-scale income Hispanic families living mainly within US border cities	20609	2.26
P60	Humble beginnings	Multi-ethnic singles and single-parent households with mid-scale incomes in city apartments	5389	0.59
R66	Cuidad Strivers	Mid-scale Hispanic families and single parents in gateway communities	5269	0.58
N48	Gospel and Grits	Lower middle income African American multi-generational families living in small towns	1401	0.15
O54	Striving Single Scene	Young multi-ethnic singles living in Midwest and Southern city centres	2187	0.24
G25	Urban Edge	Younger, up-and-coming singles living big city lifestyles located within top CBSA <sup>1</sup> markets	543	0.06
P56	Rolling the Dice	Middle aged, mid scale singles and divorced individuals in secondary cities	5728	0.63
			<b>TOTAL</b>	<b>652849</b>
				<b>71.62</b>

Source: adapted from Mosaic USA Interactive Guide, Experian, 2011

## References

1. NSW Department of Planning and Infrastructure, 2009, *Metropolitan Development Program*, <http://www.planning.nsw.gov.au/HousingDelivery/HousingDeliveryIntroduction/Metropolitandevlopmentprogram/tabid/126/language/en-AU/Default.aspx>, Sydney, last accessed 12<sup>th</sup> July, 2012
2. NSW Government, 2012, *A New Planning System for NSW Green Paper*, Crown Copyright, Sydney
3. NSW Department of Planning and Infrastructure, 2010, *Metropolitan Strategy Review – Sydney: Towards 2036 Discussion Paper*, Sydney
4. Leinberger, CB, 2011, 'The Death of the Fringe Suburb', The New York Times, 25th Nov 2011, <http://www.nytimes.com/2011/11/26/opinion/the-death-of-the-fringe-suburb.html>, last accessed 13th August 2012
5. Finfacts Team, 2006, 'European Environment Agency to showcase Dublin as "worst-case scenario" of urban planning', 4<sup>th</sup> Oct 2006, [http://www.finfacts.com/irelandbusinessnews/publish/article\\_10007490.shtml](http://www.finfacts.com/irelandbusinessnews/publish/article_10007490.shtml), last accessed 18<sup>th</sup> September 2012
6. Weidmann, B., Kelly, J-F., 2011, *What Matters Most? Housing Preferences Across the Population*, Grattan Institute, Melbourne
7. Kelly, J-F., Weidmann, B., and Walsh, M., 2011a, *The Housing We'd Choose*, Grattan Institute, Melbourne
8. Kelly, J-F., Weidmann, B., and Walsh, M., 2011b, *Project New Home (Part 1 of 2)*, Grattan Institute, Melbourne
9. Australian Bureau of Statistics, 2011, *Sydney Statistical Division Population Trends*, abs.gov.au
10. Darcy, M, 2008, *Housing Sydney*, The dictionary of Sydney, [http://www.dictionaryofsydney.org/entry/housing\\_sydney#page=all&ref=](http://www.dictionaryofsydney.org/entry/housing_sydney#page=all&ref=)
11. Johanson, S., 2011, 'Australian homes still the world's biggest', 22<sup>nd</sup> Aug 2011, smh.com.au, last accessed 18<sup>th</sup> June 2012
12. Bunkera, R & Holloway, D, 2002, 'More than fringe benefits: The values, policies, issues and expectations embedded in Sydney's rural urban fringe', Australian Planner, Vol. 39, no. 2, 66-71
13. Gleeson, B., 2010, *Lifeboat Cities*, UNSW Press, Sydney
14. McNeill, D., Dowling, R. and Fagan, R., 2005. *Sydney/Global/City: An Exploration*. International Journal of Urban and Regional Research. 29 (4), pp. 935–944
15. Andrea Dixon, 1998, 'Houses in City a Bit Rich', The Sun-Herald 16 August 1998
16. Forster, C., 2010, *Australian Cities: Continuity and Change* (3<sup>rd</sup> Edition), Oxford University Press, Melbourne

17. Frost, L., 1990, *Australian Cities in Comparative View*, McPhee Gribble, Ringwood
18. ABS data compiled for Commonwealth Securities, 2009, via smh.com.au, 30th Nov, 2009
19. Benson, S., 2008, 'Northwest Metro rail link officially shelved', dailytelegraph.com.au, 2008-10-31
20. Demographia, 2010, *6th Annual Demographia International Housing Affordability Survey*, [www.demographia.com/dhi-ix2005q3.pdf](http://www.demographia.com/dhi-ix2005q3.pdf)
21. Demographia, 2011, *7th Annual Demographia International Housing Affordability Survey*, <http://www.demographia.com/2011dhirls.pdf>
22. Pacific Micromarketing, 2011, *Mosaic Australia Interactive Guide*, Brisbane
23. Jacobs, J., 1961, *The Death and Life of Great American Cities*, Modern Library, New York
24. Duany, A., Plater-Zyberk, E., Speck, J., 2010, *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*, North Point Press, New York
25. UN Population Fund, Schlein, L., De Capua, J. & Krüger, S., 2007, 'For humanity's sake, developing world must prepare for soaring urbanisation', 28th Jun 2007, <http://www.citymayors.com/society/urban-population.html>, last accessed 19th July 2012
26. Kotkin, J., Drukker, C., Murata, K.S., Priestnall, S., 2005, 'The New Suburbanism: A Realists Guide to the American Future', The Planning Centre, Los Angeles
27. Frank Stilwell, *Globalisation and Cities: An Australian Political Economy Perspective*, Australian National University Urban Research Program, Canberra, 1997
28. XTREMEimpakt., 2008, *Consumer Segmentation*, <http://www.xtremeimpakt.com/index/Capabilities/Strategic-Services/Consumer-Segmentation>  
Last accessed 13th Aug 2012
29. Bowie, D., 2010 *Politics, Planning and Homes in a World City*, Routledge, Oxon
30. NSW State Government, 2011, *Sydney Towards 2036*, Metropolitan Strategy Review Discussion Paper, Sydney
31. NSW Department of Planning and Infrastructure, 2009, *Metropolitan Development Program 2008/09*, Sydney
32. NSW Government Planning and Infrastructure, 2010, *Sydney's Growth Centres*, Growth Centres Commission, <http://www.gcc.nsw.gov.au/the+growth+centres-5.html>
33. Globalisation and World Cities Study Group and Research Network, *Research Bulletin 369*, Loughborough University, UK, 2010 <http://www.lboro.ac.uk/gawc/world2010.html>
34. Google, 2011, *Google Maps*, Sydney
35. Michael Darcy, 'Housing: the Great Divide' in John Connell, (ed), *Sydney: the Emergence of a World City*, Oxford University Press, Melbourne, 2000; Michael Darcy, 'Pathways to Homelessness: Assessing the impact of structural and socio-demographic factors on the scope and nature of homelessness in Sydney', National Housing Conference, Brisbane, October 2001

36. Experian Mosaic, 2011, *Mosaic USA Interactive Guide*, New York
37. Experian Mosaic, 2010, *Mosaic UK Interactive Guide*, Nottingham
38. Experian Mosaic, 2010, *Mosaic Denmark FSS*, Copenhagen
39. Experian Mosaic, 2010, *Mosaic Global Look Up*, Nottingham (unpublished, courtesy of the Experian Mosaic Global team based in Nottingham, UK)
40. Department for Communities and Local Government, 1995, Planning Policy Guidance 2: Green belts, [www.communities.gov.uk](http://www.communities.gov.uk), Norwich
41. GLA, 2011, *The London Plan*, Greater London Authority, London
42. GLA, 2008, The London Plan, [www.london.gov.uk/thelondonplan](http://www.london.gov.uk/thelondonplan)
43. Ball, J, 24th November, 2011, "Wages throughout the country – How does your area compare?", The Guardian, <http://www.guardian.co.uk/news/datablog/2011/nov/24/wages-britain-ashe-mapped>
44. NYC Department of City Planning, (2012), Agency Strategic Plan, <http://www.nyc.gov/html/dcp/html/about/strategy.shtml>. Last accessed 23rd May 2012
45. Rankin, B., 2006, *City Income Donuts* - Radical Cartography, <http://www.radicalcartography.net/>
46. Fujita, K & Hill RC, 2006, *Place Stratification in Tokyo and New York*, paper presented at ISA World Congress of Sociology, Durban, South Africa, 24-29 July
47. Statistics Denmark. (2011). *Population by region and time*, <http://www.statbank.dk/bol33>, Last accessed 13th June 2012.
48. Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I., Angel, S. (1977) *A Pattern Language: Towns, Buildings, Construction (Centre for Environmental Structure Series)*, Oxford University Press
49. Matthiesson, C.W., 2007, *Infrastructure Factsheet*, Ministry of Foreign Affairs Denmark, <http://www.netpublikationer.dk/um/8583/html/chapter01.htm>
50. Vejre, H., Primdahl, J., Brandt, J, 2007, *The Copenhagen Finger Plan - Keeping a Green Space Structure by a Simple Planning Metaphor* in Pedrolì B, Van Doom A, De Blust G, Paracchini ML, Wascher D & Bunce F (Eds. 2007), *Europe's living landscapes, Essays on exploring our identity in the countryside*. Landscape Europe/KNNV
51. Okrent, D, 2009, '*Detroit: The Death — and Possible Life — of a Great City*', Time Magazine US, 24th Sept 2009, <http://www.time.com/time/magazine/article/0,9171,1926017,00.html>, last accessed 13th Jul 2012
52. Webber, R., 2004, '*Designing Geodemographic Classifications to meet Contemporary Business Needs*', Journal of Interactive Marketing, 5, (3), January/March 2004
53. Webber, R., Farr, M., 2001, '*MOSAIC: From an area classification system to individual classification*', Journal of Targeting, Measurement and Analysis for Marketing, 10 (1), August 2001

54. Webber, R., 2003, '*Geodemographic analysis of similarity and proximity : their roles in the understanding of the geography of need*', in Longley, P., Batty, M., (eds) 'Advanced Spatial Analysis: The CASA book of GIS', ESRI press.
55. Woolsey, M., 2008, '*Best and Worst Cities for Commuters*', Forbes.com, [http://www.forbes.com/2008/04/24/cities-commute-fuel-forbeslife-cx\\_mw\\_0424realestate.html](http://www.forbes.com/2008/04/24/cities-commute-fuel-forbeslife-cx_mw_0424realestate.html)
56. Owen, D., 2009, *Green Metropolis: Why Living Smaller, Living Closer, and Driving Less Are the Keys to Sustainability*, Riverhead Books, New York
57. Minton, A, 2009, *Fear and Happiness in the Twenty First Century*, Penguin, London
58. Dunham-Jones, E., Williamson, J., 2011, *Retrofitting Suburbia*, John Wiley & Sons Publishing, Hoboken
59. Gallagher, J., 2010, Survey finds third of Detroit lots vacant: Positive news uncovered, too, , Detroit Free Press, February 20, 2010  
<http://www.freep.com/article/20100220/BUSINESS04/2200371/1318/Survey-finds-third-of-Detroit-lots-vacant>
60. U.S. Census Bureau, 2009, '*Annual Estimates of the Population of Combined Statistical Areas: April 1, 2000 to July 1, 2009*'  
<http://web.archive.org/web/20100609231528/http://www.census.gov/popest/metro/CBSA-est2009-annual.html>, last accessed 12<sup>th</sup> July, 2012
61. US Census Bureau, 2010, *2010 Census Interactive Population Search*, <http://2010.census.gov/2010census/popmap/ipmtext.php?fl=26:2622000>, last accessed, 12<sup>th</sup> September 2012
62. Central Statistics Office Ireland, 2006, *2006 Census Small Area Population Statistics (SAPS)*, <http://census.cso.ie/censusasp/saps/boundaries/saps.htm>
63. Office for National Statistics, 2011, *Population Trends - No. 145, Autumn 2011* (full version), Autumn 2011, <http://www.ons.gov.uk/ons/rel/population-trends-rd/population-trends/no--145--autumn-2011/jrd-population-trends-145.pdf>, last accessed 29<sup>th</sup> September, 2012
64. Instituto Nacional de Estadística, 2011, *Population by provinces and size of municipalities*, <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fe260&file=inebase&L=1>, last accessed 29<sup>th</sup> September, 2012